MacWEEK

06.17.96 | *The Newsweekly for Macintosh Managers* | VOLUME 10 NUMBER 24

FWB exits drive business

SEE NEWS, PAGE 4

Fractal app will cross vectors, natural media

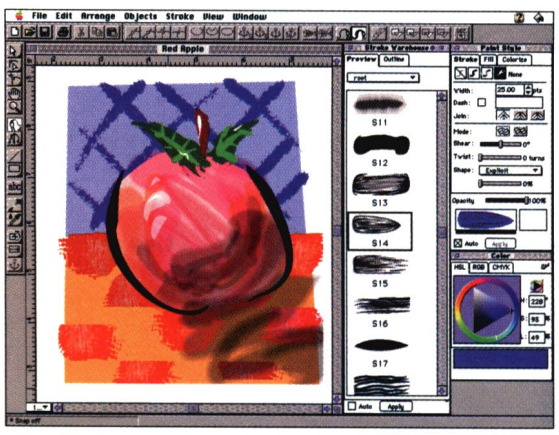
By Rebecca Gulick

Fractal Design Corp. last week announced the first progeny to spring from its union with Ray Dream Inc.: a new breed of graphics application.

The package, dubbed Expression, will cost $449 when it ships for the Mac in September and for Windows in August. It will merge Fractal's natural-media technology with vector-based drawing capabilities developed by Mountain View, Calif.-based Ray Dream, which Fractal bought last month (see 03.04.96, Page 8). Fractal said Expression will let artists design fully editable graphics that have the natural characteristics of bit maps.

"It's really spontaneous and immediate ... like a paint product," said beta tester Mark Jenkins, se-

See Fractal, Page 72



Expression will merge natural media and vectors. It will layer and stretch transparent strokes; the width and skew of strokes will vary according to the pressure applied to a tablet.

Race on for Web editors

Akimbo to arm Internet authors

By Joanna Pearlstein

Akimbo Systems hopes to enter the Web publishing competition with a slam-dunk in July.

Sources said the Somerville, Mass., company is preparing Globetrotter, a WYSIWYG HTML editor that will support tables and forms, sport a plug-in architecture, and have several features more common to word processors such as Akimbo's own FullWrite.

Despite its text-handling lineage, Globetrotter will not display HTML source code, sources said, because the company seeks to shield users from HTML coding altogether. Like Adobe Systems Inc.'s PageMill and Claris Corp.'s Home Page, the software will let users drag and drop text, graphics and sounds into a Web document.

Globetrotter will automatically

See Akimbo, Page 74

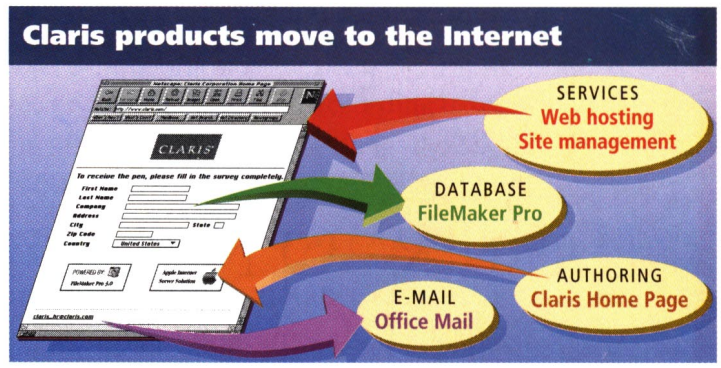
Claris Home Page built on Loma Prieta

By James Staten

Claris Corp. bought its way into the highly competitive Internet-authoring market last week by acquiring the WYSIWYG Web editor code-named Loma Prieta.

Developed by start-up San Andreas Systems of Los Altos, Calif., Loma Prieta has never been shown in public (see 05.06.96, Page 1). The program will let

See Claris, Page 74



Cyberdog is housebroken but still needs discipline

By Henry Norr

When we took the first beta version of Cyberdog around the block, we concluded that it had a lot of growing up to do if it was to live up to its masters' expectations.

In the three months since then, **REVIEW** the OpenDoc-based Internet tool kit has matured significantly: Apple's engineers used the beta period not only to squash bugs but also to address some of the pre-release version's performance problems, memory requirements and user-interface anomalies. Perhaps even more important, they've started working with other developers to tear down barriers that originally seemed to wall off Cyberdog from the wider world of Internet software development (see story, Page 33).

On one level Cyberdog, though modular in design, functions like an integrated Internet-access application. Double-clicking a document called Cy-

See Cyberdog, Page 29

With Cyberdog DocBuilder, a utility distributed with Cyberdog 1.0, users can already build custom documents with Cyberdog buttons and windows.

DOS cards jump to Pentium speed

Apple, Orange, Reply try PCI

By John Poultney

The race for market share in the DOS-compatibility world commences anew this month as Apple, Orange Micro Inc. and Reply Corp. jockey for position with hardware solutions for running Microsoft Windows on the Macintosh.

New and upcoming PCI cards from the three companies use a variety of CPUs from Advanced Micro Devices Inc., Cyrix Corp. and Intel Corp. at speeds up to 200 MHz. All three vendors' cards will ship with Microsoft Corp.'s DOS 6.22 and will run Windows 3.1, Windows for Workgroups 3.11 and Windows 95. Reply and Orange Micro said their cards will work with Windows NT by September. Apple's cards will not run NT.

▸ **Orange Micro** last week announced three product lines: the OrangePC Coprocessor Series 300, 400 and 500.

The Series 300 boards are for NuBus Macs and the Series 400 cards are for PCI, and both will use either Intel 486 or Cyrix 5x86 chips clocked at up to 133 MHz. The cards require at least 8 Mbytes of on-board RAM, expandable to 64 Mbytes. They are scheduled to ship this month.

The PCI-only Series 500, due in August, runs either Intel Pentium or Cyrix 6x86 CPUs. It can hold up to 128 Mbytes of RAM.

Orange Micro said it improved the graphics and multimedia speed in its new boards through built-in graphics circuitry.

A multipin connector on all OrangePC boards connects to a many-ended cable with parallel and joystick ports, two PC-style serial ports and 16-bit sound-in and -out ports. A special connec-

See DOS, Page 77

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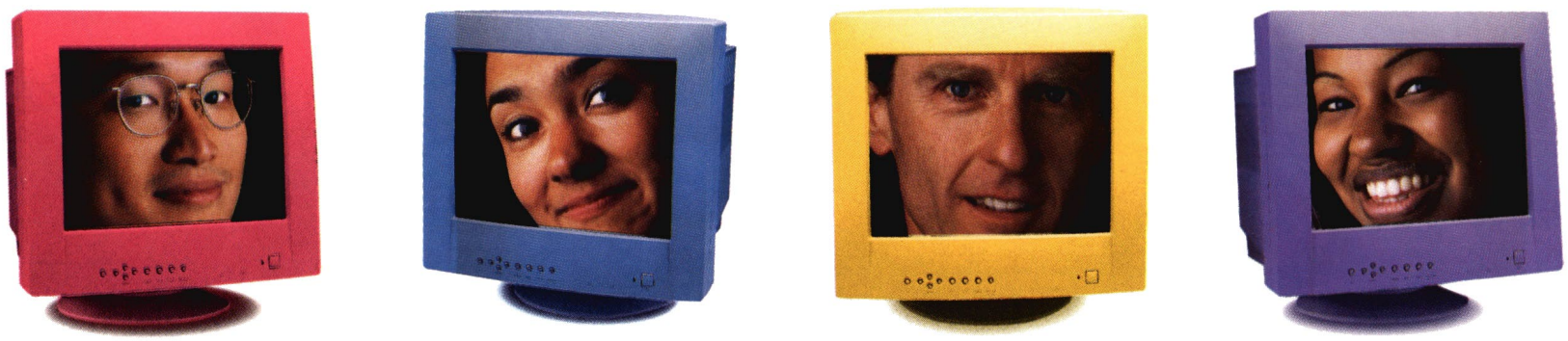

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AT DEADLINE

GoldStar may ship clones with Apple motherboards

South Korean computer manufacturer LG Electronics Inc. may — or may not — have licensed the Mac OS. Reuters last week reported the company expects to start shipping in September as many as 1,000 Mac clones a month with motherboards supplied by Apple.

According to sources, Seoul-based LG Electronics, also known as Lucky GoldStar, has not completed the deal or determined which Mac models it will offer.

Apple said it was surprised by the news and said no deal is in the works. Motorola Inc. of Schaumburg, Ill., and IBM Microelectronics Division of East Fishkill, N.Y., both of which can sublicense the OS, were unavailable for comment.

This is not the first time GoldStar announced a Mac OS license. Last September the company said it would sell Mac clones based on designs from Power Computing Corp. of Round Rock, Texas.

GoldStar offers Intel-standard PCs as well as monitors, CD-ROM drives, and other OEM consumer and computer products. □

Visioneer, HP offer fix to keep scanners cool

Visioneer Inc. last week offered users of its PaperPort Vx personal scanner a retrofit after reports of units overheating. Hewlett-Packard Co., which uses the same scanner engine in its ScanJet 4s, also provided users a remedy.

According to Visioneer, overheating may occur after a dip in power, causing the scanner's motor to lock.

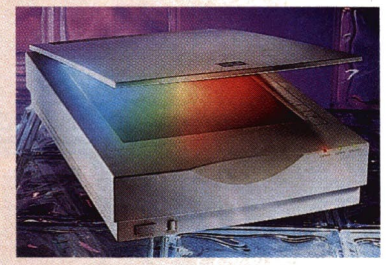
The company said the fault may occur in more than 150,000 units sold between September 1995 and May 1996; it has uncovered 40 problem units thus far. Scanners made after March 1 are not affected.

Visioneer and HP, both of Palo Alto, Calif., offer a free user-installable kit that includes a hardware power-protector plug for the affected scanners. Visioneer kits are available at (800) 834-3460; HP's are available at (800) 367-7255 or fax (510) 275-1190. □

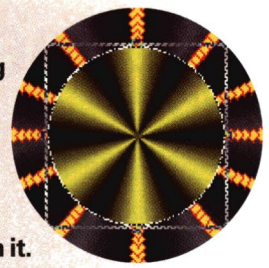
To our readers

Recognizing the increased emphasis on the Internet throughout the computer industry, we've realigned our news sections, starting with this week's issue. All Internet-related material will now appear in the Gateways section. Coverage of Macs on LANs will remain in Gateways, while Mac OS developments, databases and programming tools will join the productivity applications and peripherals in an expanded News section.

We've also changed our Contents page to include breaking news and moved our summary of weekly online activity from the back of MacWEEK to this page. □

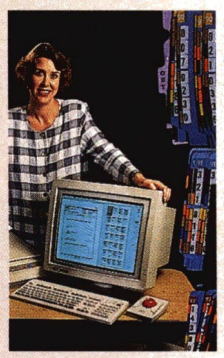


New options open for low-end scanners. See News, Page 4.



A drawing app that doesn't send users in circles as they learn it. See GA, Page 14.

3D Web Workshop offers one-stop Web authoring, more tools. See Reviews, Page 34.



The goal of a paperless office eludes even the most high-tech work places. See Solutions, Page 37.

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For a document-imaging strategy to work, it's essential to re-engineer the business. According to users who have been through it, that's no cakewalk.

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Want to look under the hood of UMAX Computer Corp.'s SuperMac S900L Mac-compatible? Download the MacBench test results we used in our review and compare them to Apple's Power Macs and Power Computing Corp.'s PowerTower line. … Don Crabb has found the essential Web utility; he describes it in Steamed Crabb, his exclusive online column. … Who writes about what at MacWEEK? Check the Info section of our home page.

MacWEEK Insider

The current runs swiftly in the Mac market, and third-party developers have to be ready to try new channels. Senior Associate Editor/GA Matthew Rothenberg looks at how recently ex-hard drive vendor FWB Inc. and financially strapped RAM seller Newer Technology Inc. are shooting the rapids (see related stories, Page 4).

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FWB to sell off hardware line

By David Morgenstern

Longtime Mac storage vendor FWB Inc. last week said it will sell its hardware business to StreamLogic Corp. of Chatsworth, Calif., and subsequently focus on software. The deal is expected to be completed July 1.

StreamLogic said it will pay $5 million in cash and $8 million in stock as well as assume about $3 million in debt at privately held FWB, based in Menlo Park, Calif. StreamLogic said FWB sold about $35.5 million of hardware in 1995, with a gross margin of $9 million.

FWB RAID products will be integrated into StreamLogic's database and video server lines. A new business unit based in Menlo Park will handle FWB hardware, which will continue to be sold under FWB's Hammer brand.

FWB will keep its software business for both the distribution channel and OEM bundles. Industry insiders estimated the value of the software business at $10 million to $15 million.

StreamLogic, previously Micropolis Corp., underwent a similar transformation in March when its hard drive manufacturing business was sold to Singapore Technologies Pte. Ltd. The company projects 1996 revenues of $50 million.

"There are more complements than redundancies between the product lines," said Lee Hilbert, StreamLogic chief financial officer. The deal adds a diverse mix of storage to SteamLogic's server RAID focus, he said. Hilbert said both product families will benefit from favorable-pricing deals with manufacturers of hard drive mechanisms, including Micropolis and Seagate Technology Inc.

In addition, StreamLogic said it will buy a minority stake in FWB's software business, which will continue under the direction of FWB founder and President Norman Fong. □

Newer files Chapter 11, denies layoffs

By Joanna Pearlstein

Newer Technology this month filed for voluntary Chapter 11 protection in the Wichita, Kan., U.S. Bankruptcy Court.

The Wichita-based maker of RAM and PowerBook peripherals said that falling dynamic RAM prices (see 06.10.96, Page 1) decreased the value of the company's inventory, causing a cash-flow problem.

"As a result of writing down inventory, we found ourselves in a liquidity crisis," said Newer President James Wiebe. "The best remedy for the cash-flow problem was a reorganization through Chapter 11 protection."

Wiebe said the privately held company has been operating for several weeks in a reorganized structure. Newer divided into two separate product groups: the Memory Products group, which Newer said accounts for 80 percent of its revenues, and the Value Added Products group,

See Newer, Page 7

Nikon, La Cie offer new color flatbeds

By Leander Kahney

Two old hands in the scanning game this week released new low-cost flatbed competitors in the 24-bit-color arena.

While Nikon Inc. made its first foray into the small-office, home-office scanning market, La Cie Ltd. buffed up the low end of its Silverscanner line.

Nikon's Scantouch 110 is the company's first foray into the small-businesses market. It offers 24-bit color, at 300 by 600 dpi, for $655. It handles images up to letter size.

Both Nikon's $655 Scantouch 110 and La Cie's $699 Silverscanner Pro use 300-by-600-dpi CCD (charge-coupled device) arrays to capture eight bits each of RGB data per pixel in a single pass. Both handle images measuring up to letter size.

The Scantouch 110 can capture images at a maximum resolution of 4,800 dpi via software interpolation, Nikon said, and it can scan a full-color page at 300 dpi in less than 24 seconds.

The Scantouch 110 ships with a SCSI-2 interface. A 50-sheet document feeder costs $595, and a transparency adapter is $499. The device is controlled by the company's Nikon Scan software and comes bundled with limited versions of Adobe Photoshop and OmniPage, Caere Corp.'s OCR package.

According to La Cie, the Silverscanner Pro offers an interpolated resolution of 1,200-by-1,200 dpi and can scan a full-

See Scanners, Page 7

NEWSMAKER

DayStar looks to future

By David Morgenstern

After a tough year filled with corporate cutbacks and revised business plans, DayStar Digital Inc. President Andrew Lewis recently shared with MacWEEK his outlook for the company's future and the Mac market.

ROBERT HOUSER

DayStar President Andrew Lewis said companies need to trim the time it takes to bring products to market.

DayStar shipped its four-processor Genesis MP clone last fall and in April introduced a model with a pair of processors. The company's systems cost $7,000 to $13,000; until a spring cost reduction, the high-end model was priced at more than $17,000.

Lewis said DayStar, based in Flowery Branch, Ga., initially expected to sell to high-performance users of Silicon Graphics workstations. "The reason we were unable to do it at this point is the number of applications we had for multiprocessing was far less than what we expected when we first came out of the gate," he said.

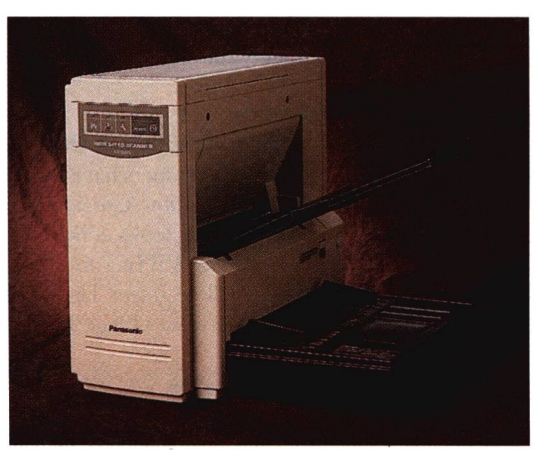
The lack of sales pushed the company to scale back both its upgrade-card and clone operations. DayStar this spring laid off about

See DayStar, Page 7

Panasonic production scanners focus on Mac

By Leander Kahney

Panasonic Computer Peripheral Co. is launching two new high-speed document scanners into the Mac market. Due in July, the eight-bit gray-scale devices will represent the company's first Mac-based models designed for fast, automatic scanning of business documents, Panasonic said.



Panasonic's new high-speed upright scanners can process 27 monochrome pages per minute.

At a maximum resolution of 300 dpi, the $8,399 KV-SS55 and $6,299 KV-SS50 will capture double- and single-sided documents, respectively, at a rate of up to 27 monochrome pages per minute.

Like desktop flatbed scanners, both models employ CCD (charge-coupled device) arrays, but they feature a proprietary upright design. The scanners accommodate documents of up to 100 sheets, including business cards and legal-size pages. They also include a bottom-to-top feed mechanism that pulls stacked documents from the base of the scanner and collects them at the top.

Both devices connect to the Mac via a SCSI interface; they will ship with Mac drivers and a scanning utility from Pixel Translations of San Jose, Calif.

Analyst Kristy Holch of InfoTrends Research Group Inc. of Plymouth, Mass., said the scanners will appeal to professionals in vertical markets, such as law, who want to make digital copies of documents for their Mac-based systems.

"There's been virtually nothing in this segment before now," Holch said. "I think there'll be a lot of interest."

Panasonic Computer Peripheral Co. of Secaucus, N.J., can be reached at (201) 348-7000 or (800) 742-8086; fax (201) 392-6594; http://www.panasonic.com.

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Computer Reseller News gave the SonicTron PT770 their Editor's Choice award in April, 1996.

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Aperture Grille Pitch	0.30mm	0.30mm	0.25mm	0.25mm
CRT Size	21"	20"	17"	17"
Viewable	20.0"	19.1"	16.0"	16.0"
Horizontal Scan Rate	30-96 KHz	30-85 KHz	24-82 KHz	30-65 KHz
Maximum MAC® Resolution	1600x1200	1280x1024	1280x1024	1024x768
Color Control	Yes	Yes	Yes	No
CRT Warranty	3 Years	2 Years	3 Years	2 Years
MSRP*	$1,995	$2,299	$945	$1,099

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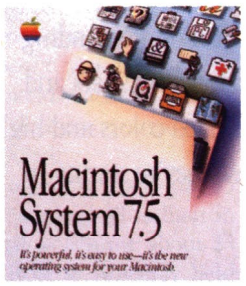
Nelson needs to get on the net, Freiman can't find a file, and Peterson's forgotten his password. Again.

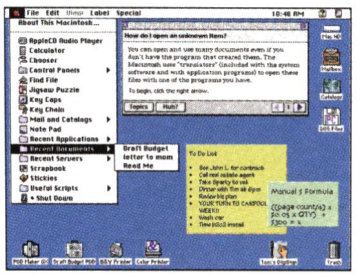
Let's talk System 7.5



As an IS Professional, you probably spend a great deal of time solving other people's computer troubles while putting off work of your own. Don't fret, with Macintosh System 7.5 your coworkers can become far more self-sufficient, and you far more productive.

Someone to ask before they ask you

System 7.5's new Apple Guide interactive help system gives your coworkers access to an IS expert right inside their Macintosh. You'll save valuable training and support time as Apple Guide walks your staff through even the most complicated functions step by step, highlighting exactly what to do next. In fact, this is an interactive help system so advanced you can customize it to your individual business needs.*



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Mac OS

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This offer is good only in the U.S. Canadian customers please call 1-800-361-6075. Macintosh System 7.5 runs on Apple Macintosh, PowerBook and Power Macintosh computers and requires 4 MB of RAM, 8 MB for Power Macintosh systems (8 MB recommended for all systems). *©1995 Apple Computer, Inc. All rights reserved. Apple, the Apple logo, Macintosh, PowerBook and Power Macintosh are registered trademarks of Apple Computer, Inc. in the U.S. and other countries. The Mac OS logo is a trademark of Apple Computer Inc. All other trademarks are the property of their respective owners.*

MASS 2.0 visualizes ads

By John Poultney

Gannett Media Technologies International plans to grant broader powers to newspaper advertising sales professionals in July when it delivers Version 2.0 of its cross-platform Mobile Advertising Sales System sales-automation software.

Mobile Advertising Sales System, or MASS, gives a sales force remote-ordering and account-tracking capabilities. It will gain in Version 2.0 an ad-visualization tool, which the company said will let sales representatives mock up newspaper ads for customers. MASS also includes a suite of tools that give users access to customer, contract and credit information.

MASS clients connect to Mac servers via Apple Remote Access for file updating and synchronization; the company said it plans to ship a version for Microsoft Windows NT servers later this year.

Pricing starts at less than $100,000 for a 10-user client-server system, which comes with 10 PowerBook 190 machines loaded with 24 Mbytes of RAM and 500-Mbyte hard drives, and an Apple Workgroup Server 8150 with 32 Mbytes of RAM and a 1-Gbyte hard drive. A software-only package costs about half that amount, the company said.

Gannett Media Technologies International, a subsidiary of Gannett Co. Inc., of Cincinnati, can be reached at (513) 665-3777 or (800) 801-3771; fax (513) 241-7219; http://www.gmti.com. □

DayStar

From Page 4

half of its employees (see 04.08.96, Page 4).

Now, Lewis said, there are more than 2,000 applications in development, "and by the end of this year, there's going to be a critical mass."

Lewis said the company will continue to sell into pre-press and Adobe Photoshop-centric markets and will offer multiple-processing (MP) extensions to boost performance for digital video and 3-D applications. Of DayStar's Mac OS experience and MP API, Lewis said, "We plan to take it to multiprocessing QuickTime and then provide it in a distributed network solution that allows rendering farms to be created — where you have multiple Genesis systems on a rackmount capability and grind away at Cinepak [compression] all day."

The company forecasts strong demand in its current price range. The Mac market is composed of a lot of non-Unix users who aren't using SGI and don't pay SGI prices, Lewis said.

"Genesis is really the ultimate multimedia authoring system," Lewis said, and then he counted several new additions to the MP list, including graphics applications such as Adobe After Effects and Electric Image Inc.'s ElectricImage Animation System.

According to Lewis, the increased pace of Apple's licensing of the Mac OS and recent sublicensing agreements from IBM Corp. and Motorola Inc. will help small vendors such as DayStar concentrate more economically on vertical markets.

"The commodity motherboard manufacturers make our job far easier," he said. "This is a big windfall for us because we don't have to keep designing everything.

"So we don't see DayStar becoming a monolithic Compaq [Computer Corp.], or a little baby Mac Compaq. My prediction is that every [Mac] clone company will be OEM-ing from one of the larger, multi-billion-dollar companies."

Lewis pointed to Avid Technology Inc. as an example for its new outlook. "Avid took the Mac, added a lot of components to it, of their own design and others, and integrated them to provide the video-editing market a closed solution with guaranteed performance," he said. "This market of providing value-added to the Mac with specific technologies is where DayStar's future lies."

Apple has recently stepped up the pace with support for multiprocessing, Lewis said, pointing to Apple's recent completion of its MP API and forthcoming dual-processor systems. He said Apple has hired an evangelist, and its developers technical services will support the API.

In addition to the API, Apple is providing symmetric multiprocessing, he said. "That's a huge win for the Mac OS to have that. It's a year away — I'm guessing a year," Lewis said. At the Apple Worldwide Developers Conference in May, Lewis said, Apple gave the message that "this is the future for the Mac. This is a key component. You've got to have threaded applications."

However, Lewis described the current state of programming for multiple processors as "an art" and said most software needs tuning to improve performance.

"This API is more limited in its current form than what [Windows] NT API provides — in very minor ways — but it's important to know those limitations and how to work around them," Lewis said.

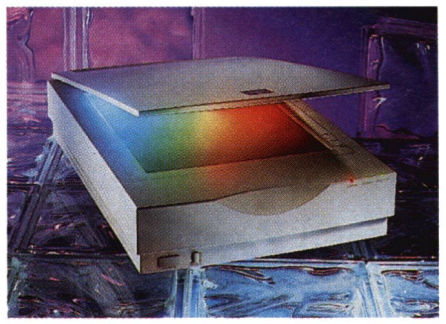
Developers will also need to learn how to balance memory and I/O for MP loads, Lewis said. He said future releases of Metrowerks Inc.'s CodeWarrior will provide the tuning automatically.

Programming alone does not hold the key to success for DayStar, Apple and the Mac market, according to Lewis. He said companies need to trim the time its takes to bring products to market, following Netscape Communications Corp.'s example.

"Netscape is forcing everybody to move faster, and you've got to deliver in six months," Lewis said. "Apple's always been late, and it's got to change," Lewis said.

According to Lewis, it is also important for Apple to clearly define the future direction for the Mac.

"The Mac is exciting. The Mac is emancipating. But it's hard to translate that into return on investment," he said. "People aren't in love with computers anymore like they were. They are in love with the applications and what they can do with them." □



The $699 Silverscanner Pro from La Cie delivers 24-bit-color scans at 300 by 600 dpi. It comes with La Cie's Silverscan driver software and ImageXpress' ScanPrep utility.

Scanners

From Page 4

color, letter-size page in less than a minute. The scanner comes with La Cie's Silverscan driver software, the limited versions of Photoshop and OmniPage, and ImageXpress Inc.'s ScanPrep scanning utility. A bundle that does not include Photoshop costs $599.

La Cie does not offer a document feeder or a transparency adapter for the Silverscanner Pro.

Nikon Inc. of Melville, N.Y., can be reached at (516) 547-4200 or (800) 526-4566; fax (516) 547-0305; http://www.klt.co.jp/nikon.

La Cie Ltd. of Beaverton, Ore., can be reached at (503) 520-9000 or (800) 999-0143; fax (503) 520-9100; http://www.lacie.com. □

Newer

From Page 4

the division that makes Mac peripherals. The new divisions operate as separate profit-and-loss centers and manage their own sales, marketing and finances.

The company plans no layoffs, Wiebe said, and will continue operations as usual. "We're shipping record volume of product, and our support remains toll-free," he said, noting that the company recently added staff to its technical support team.

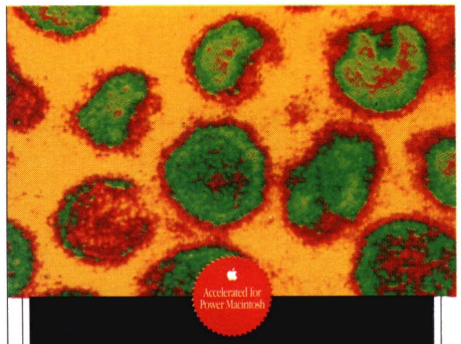
Chapter 11 is the bankruptcy form that protects a company from litigation by creditors while the company reorganizes its finances.

Falling RAM prices in May led RAM manufacturer Micron Technology Inc. of Boise, Idaho, to ask the U.S. Department of Commerce to investigate possible chip dumping. At that time Micron also said it would cut costs and hiring plans as a result of its declining revenues. □

For the record

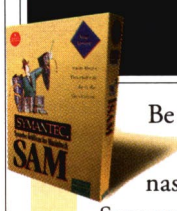
The acronym POP 3 was incorrectly defined in the June 10 story on FutureShare (Page 1). POP 3 stands for Post Office Protocol Version 3.

Also in the June 10 issue, a story on Page 24 gave incorrect prices for White Pine Software Inc.'s eXodus and Insignia Solutions Inc.'s NTrigue. The correct prices are $295 and $1,995, respectively.



HOW IRONIC.

YOUR MAC GETS A VIRUS AND YOU'RE THE ONE WHO GETS VIOLENTLY ILL.



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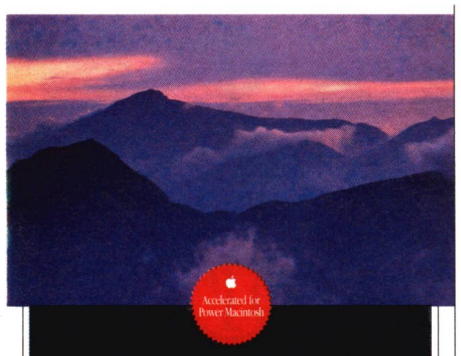

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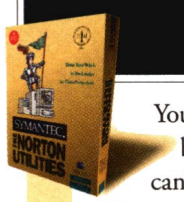

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Power Objects due for rev

Version 2.0 will add Crystal Reports tool

By Clifford Colby

Oracle Corp. offered users a glance at its next version of Power Objects.

The company said it intends to release Version 2.0 of its Power Objects application-development tool in the third quarter. Oracle said the update will run native on Power Macs; the initial version was available only in a 680x0 version. Version 2.0 will also include hooks into Open Database Connectivity middleware, according to Oracle.

Version 2.0 will not include support for OpenDoc. The company had said it would fold the component-architecture into 2.0, but Oracle later said OpenDoc will appear in a later edition.

Oracle said it plans to bundle Crystal Reports with the Power Mac version of Power Objects. The report writer from Crystal, a subsidiary of Seagate Software Co. of Vancouver, British Columbia, will make its first appearance on the Macintosh this fall.

Crystal said the database tool will initially be available only in bundles, but the company said it may offer Crystal Reports in a retail package as well. Oracle said it also intends to bundle Crystal Reports with the Microsoft Windows 3.1, 95 and NT versions of Power Objects.

Barry Johnson, principal of Dynamic Information Systems, a software-development company in Minneapolis, said: "The reports editor in Power Objects 1.0 left something to be desired. Crystal is the de facto standard on the Windows side for reporting.

"Bundling Crystal will allow them to leapfrog the competition," Johnson said. "Of all the features in Version 2.0, this will make the biggest difference for end users."

Oracle said it expects to release a beta of the new release this month. The company has not yet set pricing for Version 2.0.

Oracle Corp. of Redwood Shores, Calif., can be reached at (415) 506-7000 or (800) 672-2531; fax (415) 506-7200; http://www.oracle.com. □

CI Labs appoints president

By Clifford Colby

Component Integration Laboratories Inc. plugged in a new president this month and announced that its membership passed the 2,000 mark.

The consortium, which promotes the OpenDoc component-software standard, named Frank C. Mara as president, replacing Bruce Cleveland, who held the office since November 1995. Mara had been CI Labs' sales and marketing vice president and prior to that was a senior marketing manager with Apple.

CI Labs' announcement of more than 2,000 members comes during a season of vigorous growth. The consortium's membership expanded from 30 in March and 1,000 in May. "The general consensus is we have liftoff," Mara said. "We have attracted the fence sitters who were waiting for things to happen, so the beta of OpenDoc for [Microsoft] Windows coming out this month and the announcements at Apple's Worldwide Developers Conference (see 05.20.96, Page 1 and 05.13.96, Page 20) have given these people a push."

Mara said CI Labs, based in Sunnyvale, Calif., will release this summer a tool kit for Mac and OS/2 platforms that will allow developers to test their components' ability to operate with other developers' components. Mara said the Windows 95, NT and AIX interoperability kits will be available by the end of the year. □

Parana refills ink

Parana Supplies Corp. now offers printer-ink refill kits for Hewlett-Packard Co.'s DeskJet and DeskWriter 600 Series.

The black-and-white refill kit is $29.95 and gives two cartridge refills, the company said. The color refill kit costs $34.95 and allows three to four refills per color (cyan, magenta and yellow).

Parana said the kits offer 70 percent savings over the cost of buying new cartridges.

Parana Supplies Corp. of Torrance, Calif., can be reached at (310) 793-1325 or (800) 472-7262; fax (310) 793-1343. □

Novell revises GroupWise prices, releases betas

By John Poultney

In a move to demystify the purchasing process, Novell Inc. announced a simplified pricing model for its GroupWise 4.1 enterprise messaging system. Additionally, the company moved the next version of the package into public beta testing and released its second-quarter financial results.

Novell said its new per-user licensing plan will provide savings for smaller companies. Previously, the company used a scheme that priced clients, gateways and message servers separately. Aside from causing confusion, this approach sometimes put small companies at a disadvantage, particularly when purchasing servers and gateways.

A GroupWise package with an NLM (NetWare Loadable Module) message server would have cost $10,639 for a 25-user site under the old plan, Novell said. Now the same system would cost only $3,840.

The new per-user pricing applies to the GroupWise Universal Mailbox, which includes NetWare and DOS-administration NLMs and asynchronous and Message Handling Service gateways. The software now fully supports AppleScript and PowerTalk.

Prices range from $718 for a five-user pack to $32,625 for a 250-user license. Current 4.1 licensees can upgrade to the complete Universal Mailbox for $287 for five licenses to $13,050 for 250 users.

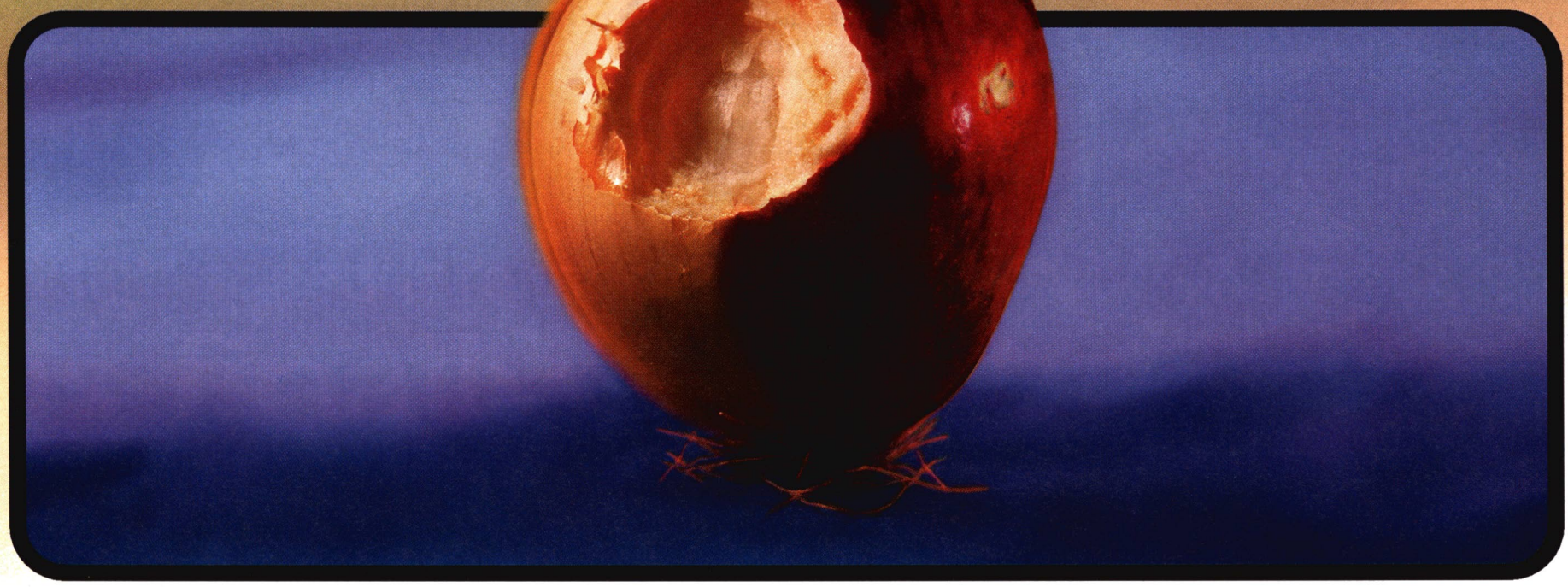
In the meantime, Novell has started beta testing a companion Web server, GroupWise WebAccess. Slated for general release in early August, the software will let users access GroupWise Universal Mailboxes (and thereby mail, faxes, voice mail, calendars, address books and attached files) through any Web browser. Pricing for the utility will range from $249 for a 10-user pack to $1,999 for a 100-user license.

Also in beta is GroupWise 5, code-named GroupWise XTD. This expanded, client-server version will include full document-management capabilities, the company said. Due for general release in late summer, the update will let users search GroupWise servers for related information stored in documents, attachments, schedules, messages and shared folders. Beta registration for WebAccess or GroupWise 5 is available at Novell's Web site.

In financial news, the company last week released results for the second quarter ended April 27. Following a change in its distribution stocking policy, Novell's worldwide channel inventory decreased by some $225 million during the quarter. Correspondingly, revenue decreased to $188 million for the period, yielding a loss of $55.36 million, or 15 cents per share. In the second quarter of 1995, the company had earnings of $95.87 million, or 26 cents per share, on $530 million in revenue.

Novell Inc.'s GroupWise division of Orem, Utah, can be reached at (801) 429-7000 or (800) 453-1267; http://groupwise.novell.com. □

Oddly, most PC cards built for two functions are only good at one.



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IBM shows prototype

IBM Corp. showed off its first PowerPC Platform desktop reference design at this month's Computex '96 trade show in Taipei, Taiwan.

The design from IBM's Microelectronics division of East Fishkill, N.Y., is a PPCP-compliant motherboard for personal computers. Code-named Long Trail, it will be able to run the Mac OS, Microsoft Windows NT, Novell NetWare, IBM's AIX and Sun Microsystems Inc.'s Solaris operating systems (see 05.06.96, Page 4). The design is based on a chip set from VLSI Technology Inc. of San Jose, Calif., and firmware from FirmWorks of Mountain View, Calif. Any PPC developer can get free information about the design on the Web at http://www.chips.ibm.com.

IBM also said it has created a Mac OS technical support group in its Taipei-based PowerPC Technical Center. The group will assist developers of PowerPC-based boards and systems, IBM said. □

NEC to trot out line of 8x CD-ROM drives

Data transfer rate reaches 1.2 Mbytes

By John Poultney

Putting a faster spin on its line of CD-ROM drives, NEC Technologies Inc. announced last week it will join the ranks of vendors bringing 8x devices to Mac users.

The external MultiSpin 8Xe and internal MultiSpin 8Xi drives, priced at $449 and $349, respectively, will offer a sustained data transfer rate of 1.2 Mbytes per second. The SCSI-2 drives, due in July, will achieve an average access time of 140 milliseconds, the company said. The drives will come standard with 256 Kbytes of cache memory.

NEC said the devices will be compatible with Photo CD, CD-I, Enhanced CD and Video CD formats. The company said later models will comply with the Digital Video Disc standard.

NEC Technologies' 8Xi internal CD-ROM drive will include an integrated drawer mechanism, front-panel controls, a dust door and an automatic lens-cleaning system.

A custom bezel and mounting kit will be available to install the 8Xi into Macs with tower cases. A headphone jack, along with volume and track-selection controls, will be available on the front panel of both drives. For PowerBooks equipped with PC Card slots, the company will offer a $179 interface card and cable for connecting a drive to the portable.

Although the drives will be compatible with the Macintosh's built-in SCSI interface, NEC said it intends to offer Mac users its $129 SmartSCSI Fast SCSI-2 PCI card, which will optimize performance and throughput on PCI-based Power Macs.

The card will reduce CPU utilization during read operations by as much as 75 percent, according to NEC.

Stan Corker, an analyst at International Data Corp. of Framingham, Mass., said 8x drives should be popular in the Macintosh market.

"People have historically been influenced by what Apple does, and their plan to include 8x drives in upcoming systems should continue that tradition," Corker said. "The real question is, what's next after 8x?"

NEC Technologies Inc. of Itasca, Ill., can be reached at (508) 264-8000 or (800) 632-4636; fax-back (800) 366-0476; http://www.nec.com. □

Metrowerks posts Q3 loss

Metrowerks Inc., maker of the CodeWarrior programming environment, reported a net loss of $147,000 for its third quarter, ended April 30. The Austin, Texas, company said the loss occurred in part because it did not have a major product rollout during the period.

For its latest third quarter, Metrowerks said it had revenues of $2.4 million, up from revenues of $1.3 million in the corresponding 1995 period.

The company said that increased expenses in R&D — including its push to incorporate Sun Microsystems Inc.'s Java into its product line — cut into profits. Metrowerks said a move into new facilities also affected its earnings during the quarter. □

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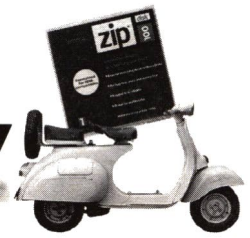
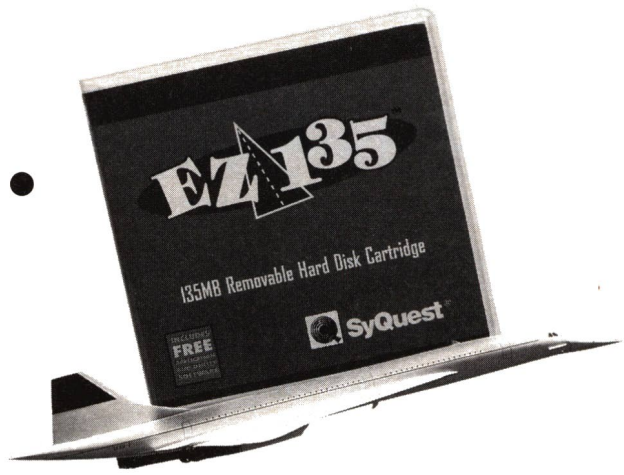
Why  ...



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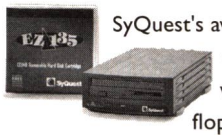

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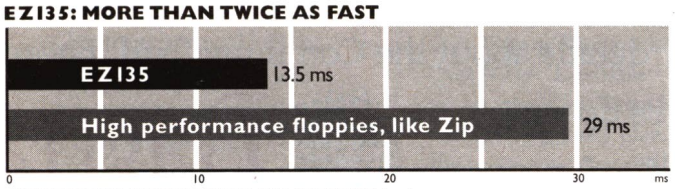

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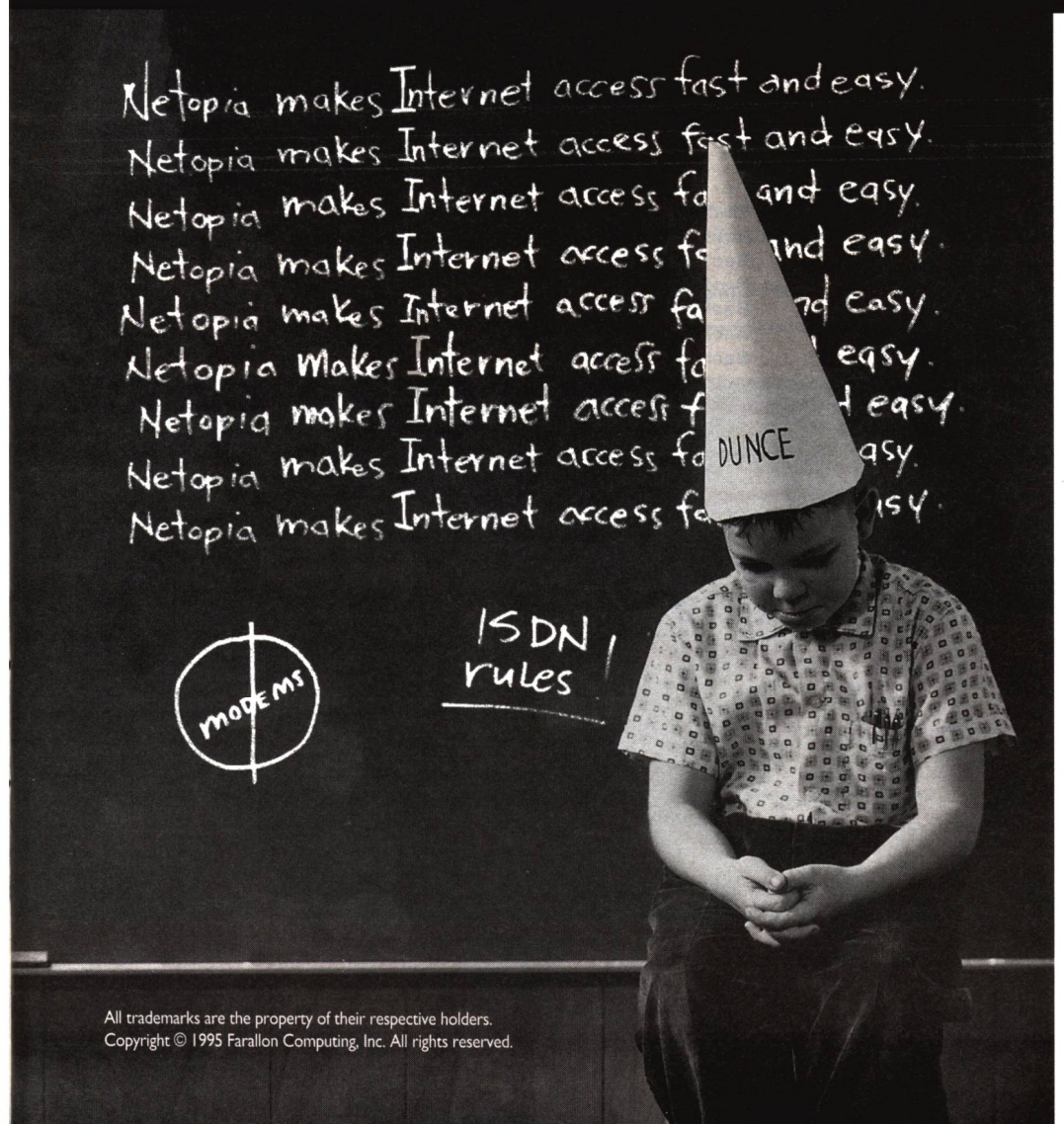
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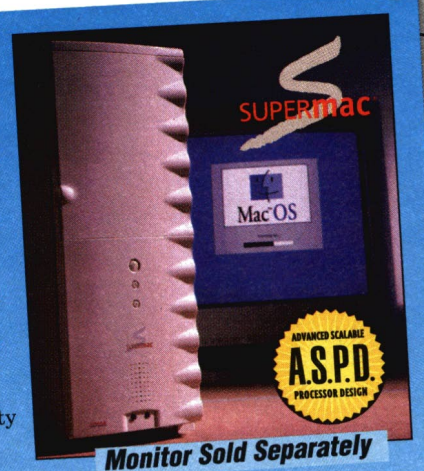

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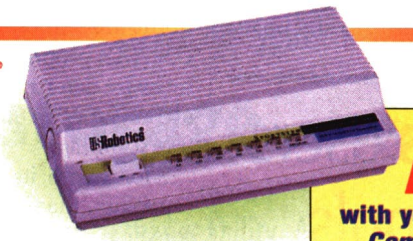

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Dancer to animate GX

PaceWorks app due out this year

By Kelly Ryer

Once the wallflower of the graphics industry, Apple's QuickDraw GX graphics architecture is finding many new partners. Among them is Dancer, a forthcoming 2-D animation tool with roots in France.

Dancer is slated to ship later this year from PaceWorks Corp., a U.S. business recently created by Idéale Audience SA, a video-production company based in Paris. While PaceWorks is still working out Dancer's feature list, the software is expected to cost less than $1,000.

According to PaceWorks, the animation tool will benefit from QuickDraw GX's text and shape manipulation, as well as its sophisticated color modeling and splines support.

Moon dance: With PaceWorks' Dancer, users can create animations by arranging graphics and sound elements onto a time line.

Dancer's interface will consist of the Hub, a library of drag-and-drop objects; a composition window; and the Synchro window, where users arrange objects on a time line.

Between each object's birth and death points are "dances," PaceWorks' name for an object's behavior. Dances will include changes in size, movement, color, transparency and rotation; properties can be edited via spline controls. Dances can also be pasted from one object to another.

Audio support will be a key feature of Dancer. Users will be able to see sounds represented as waveforms in the Sequencer

See Dancer, Page 16

UMAX introduces new high-res flatbed

By Matthew Rothenberg

UMAX Technologies Inc. last week released its latest flatbed scanner designed for the graphics market.

The PowerLook 2000, available now for $4,995, includes a cold cathode lamp as well as a CCD (charge-coupled device) array with an optical resolution of 1,000 by 2,000 dpi. According to UMAX, it can reach 10,000 by 10,000 dpi via software interpolation. The SCSI-2 device captures 12 bits each of RGB data per pixel in a single pass and features a dynamic range of 3.3.

The scanner handles reflective or transparent originals measuring up to 8 by 11.7 inches or 8 by 10 inches, respectively. UMAX said the PowerLook 2000 can capture a 4-by-5-inch color image at 1,000 dpi in 44 seconds.

Featuring an optical resolution of 1,000 by 2,000 dpi and a price tag of less than $5,000, UMAX's PowerLook 2000 is poised to take on Agfa's DuoScan.

The PowerLook 2000 ships with frame holders for 135mm, 120mm and 4-by-5-inch slides. Each frame holder can accommodate up to 12 35mm slides, UMAX said. When users place a frame holder on the scan bed, UMAX's proprietary MagicScan software determines the position of the frames automatically before scanning.

Along with its slide-scanning capability, MagicScan also offers conversion to CMYK, batch scanning, and the ability to preload and save scan modes. It sup-

See UMAX, Page 16

FOCUS ON PUBLISHING

Acrobat to challenge TIFF/IT for digital ads

By Anita Malnig

If Time Inc. Director of Pre-Press Development Frank Scott gets his way, his company will digitally transmit 15 percent of all advertisements in its publications by year-end. And he said he hopes New York-based Time will have enough digital ads to print direct-to-plate by January 1998.

The switch to digital ads has begun, and TIFF/IT is the format that's making it possible. TIFF/IT, a variation of the TIFF standard that carries specifications for printing presses, has been made a standard by the American National Standards Institute. Enhancements to the Portable Document Format (PDF) due in the upcoming Adobe Systems Inc.'s Adobe Acrobat 3.0, however, may challenge TIFF/IT as the transport medium for PostScript-based ads (see 06.10.96, Page 16).

Rasterize now or later

In February, Time's Sports Illustrated ran a Canadian Mist ad, the company's first ad to use TIFF/IT. People magazine's June 10 issue carried a TIFF/IT-based Kodak ad, and the June 17 issue ran an ad for Casio using the new format. The rasterized format is uneditable, a feature Time's Scott said he finds invaluable.

"I like TIFF/IT because it locks in all fonts and design issues," he said. "TIFF/IT is the

See Focus On, Page 16

Peirce gives graphics users a share of drawing tools

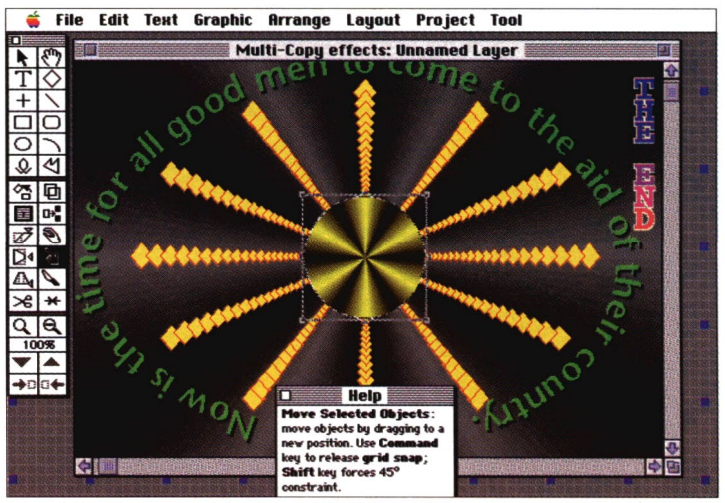
By Rebecca Gulick

For those frugal shoppers who like to try before they buy, Peirce Software offers ShareDraw 2.01, drawing shareware honed for QuickDraw GX printing.

ShareDraw, originally available for $49.95 as ExpertDraw from Expert Software Inc. of Coral Gables, Fla., is a 24-bit-color drawing application that features gradients, color blends, rulers, grids, a graphics library and text binding to any curve.

With Version 2, which shipped late last year, ShareDraw became Power Mac native and gained

See ShareDraw, Page 16


File Edit Text Graphic Arrange Layout Project Tool
Multi-Copy effects: Unnamed Layer
Now is the time for all good men to come to the aid of their country.
THE END
Help
Move Selected Objects: move objects by dragging to a new position. Use Command key to release grid snap; Shift key forces 45° constraint.

ShareDraw from Peirce Software provides multicopy effects, project management and live help. It supports QuickDraw GX printing and WorldScript.

Apple is top media box

By Leander Kahney

Macs continue to be the world's best-selling multimedia computer, according to a recent survey.

But despite selling 67 percent more multimedia machines than it did in 1994, Apple still managed to lose market share in 1995. The reason: Apple isn't growing as fast as the multimedia computer market.

According to a survey from Dataquest Inc. of San Jose, Calif., 1995 was the third consecutive year Apple outsold its rivals.

Apple shipped nearly 4 million multimedia computers, worth almost 19 percent of the total market, and nearly a million more

See Multimedia, Page 16

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Maxoptix	T42600	2.6 GB	$2525	39	3000
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FOCUS ON
From Page 14

equivalent of digital film."

However, some print producers, even within the small circle of TIFF/IT users, are looking to Acrobat's PDF as an alternative.

"I'm eagerly awaiting it; then I won't need TIFF/IT," said Graham Turpin, director of production services at New York's Merkley Newman Harty, the advertising agency that produced the Casio ad.

Acrobat 3.0's chief appeal is its ability to handle four-color images in PDF files, said Rob Babcock, senior product marketing manager at Adobe of Mountain View, Calif. Other PostScript Level 2 features due include preservation of Open Prepress Interface (OPI) comments, overprint settings and halftone screen information.

A drawback of PDF, according to some, is that the file gets rasterized after it has been transmitted, rather than before as with TIFF/IT.

TIFF/IT tools

While Acrobat 3.0 is due in August, TIFF/IT is accessible today with a variety of PostScript-conversion tools. Many high-quality ads in U.S. publications are created with PostScript-based Mac products before additional work is done on high-end systems.

The product instrumental in the Casio, Kodak and Canadian Mist TIFF/IT ads was SciNet SpanPro from Bedford, Mass.-based Scitex America Corp. This $4,000 package comprises Mac-based image-conversion software and an Ethernet board, and it accepts TIFF/IT files generated on any hardware.

Other TIFF/IT products include the Crosfield Studio 9000 series from DuPont Printing & Publishing in Wilmington, Del., which saves files as TIFF/IT, and the Da Vinci system, LinoServer and Delta RIP from Linotype-Hell Co. of Hauppauge, N.Y. Ultimate Technographics Inc. of Montreal offers the RIP 2 TIFF system, a PostScript Level 2 rasterizer, which outputs to TIFF/IT. Members of the Vista, Calif.-based Digital Distribution of Advertising for Publications Association can get a TIFF/IT plug-in for Adobe Photoshop by contacting the organization at DDAP@wlg.com.

Introducing the Kodak Advantix system.
A new kind of film for a new kind of camera.
with zero, simple loading and a choice of three picture sizes.
"There are beautiful pictures in all of us."
so the pictures you get can be the best you've ever taken.
The Advanced Photo System.
Kodak Advantix film and cameras.
Take pictures. Further.

This Kodak ad appeared in June 10 issue of People. Created by J. Walter Thompson Co., it is one of the first ads that Time received in TIFF/IT.

Life cycle of pioneer ads

The Kodak ad from New York's J. Walter Thompson Co. and Merkley Newman's Casio piece began life in Adobe Photoshop and QuarkXPress.

Both agencies chose New York pre-press house Kwik International Color Ltd. to do the conversion. At Kwik, some PostScript files were merged on a Scitex system with the photography. Then those files were pulled into the Mac, saved as TIFF/IT with SciNet SpanPro and shipped to Time via removable disk.

"We opened the file on a Mac and proofed it on a [3M Printing and Publishing Systems] Rainbow," Scott said. "Then, using SciNet SpanPro, we converted the TIFF/IT into a format for our Scitex production system. The file was sent to our [satellite] transmission plant, then to the printing plant." At the printer, the files were output to film, he said.

Benefits

Turpin of Merkley Newman said he sees a tremendous savings in film costs from digital ads. "When I make an ad for Time Inc. books, I need seven sets of film. My client pays $2,600 just for film and Matchprints."

Whether TIFF/IT will catch on, or PDF will become the vehicle of choice, or publishers will request and accept both formats, remains to be seen.

But according to Alan Darling, chief operating officer at Western Laser Graphics Inc. of Valencia, Calif., "The standards organizations are working toward the integration of TIFF/IT as an accepted raster format within PDF; that will ensure interoperability between desktop and high-end systems." □

Rascal checks fonts

By Rebecca Gulick

Joining a growing fleet of font au pairs, Rascal Software last week announced a new font reporting and collecting application.

Font Sneak, slated to ship in July for $89.95, will report on all fonts used by a QuarkXPress, Adobe PageMaker, Illustrator, FreeHand or EPS document, including those that are not currently activated.

The stand-alone utility will collect fonts for pre-press output. It will also collect deactivated fonts for quick installation via the Font folder or Suitcase 3.0 from Symantec Corp. of Cupertino, Calif. Font Sneak can collect entire font families, and users can selectively exclude fonts from a collection.

Rascal also offers two other font utilities. The FONDler, a $69.95 font-diagnosis tool, identifies and helps users correct font conflicts and defective font components. The utility reports on more than 96 common font problems. TypeBook, $49.95, generates typeface reference catalogs automatically.

Rascal Software of Newhall, Calif., is at (805) 255-6823; fax (805) 255-9691; rascal@rascalsoft.com; http://www.rascalsoft.com/. □

ShareDraw
From Page 14

GX printing support as well as multicopy effects and project management. Version 2 also supports WorldScript for double-byte characters such as kanji.

ShareDraw can export graphics as PICT or EPS files and import MacPaint, EPS and PICT files as well as QuickTime movies. To conserve memory, the software can link to large files instead of importing the entire image.

ShareDraw features a live help system that remains enabled until the software is registered.

James Click, vice president of QBF&A Inc. of Phillipsburg, N.J., said the built-in help and straightforward interface make ShareDraw easy to learn. "Within 10 minutes I was up and running," Click said.

Marc L. Beningson, a principal at Beningson and Associates LLC of Baltimore, uses ShareDraw to present concepts and coordinate details with architects. He said that while ShareDraw is not as complex as low-end CAD programs, it "is more useful for engineering tasks than many other draw programs."

The registration fee is $24.95; for sites with more than 10 Macs, the fee is $12.50 per seat.

Peirce Software of San Jose, Calif., can be reached at (408) 295-9760 or (800) 828-6554; fax (408) 295-9433; info@peircesw.com; http://www.peircesw.com/. □

Dancer
From Page 14

window. Dancer will import AIFF (Audio Interchange File Format) or MIDI formats. Other formats may be included in the future, PaceWorks said.

The 2-D animation tool will also make use of QuickDraw GX's extensive text controls, including ligature, tracking and kerning adjustments with QuickDraw GX fonts. Spacing controls will be available to all fonts, including TrueType and Type 1.

In addition, Dancer will antialias text and shapes and let users animate words and apply supplemental animation to individual characters, the company said.

Dancer will import images in a host of formats, including PICT, MacPaint, Adobe Photoshop, GIF, JPEG, QuickDraw and SGI.rgb., a color format used with Silicon Graphics Inc. workstations.

Users will be able to adjust the frame rate, size, resolution and compression levels for their animated output. Dancer will export animations as multitrack QuickTime movies, QuickTime sprite movies, PICT files or QuickDraw GX files.

PaceWorks Corp. of Palo Alto, Calif., can be reached at (415) 855-0900; fax (415) 493-5321; info@paceworks.com. □

UMAX
From Page 14

ports TIFF, JPEG, Targa, PCX, BMP, PICT and Adobe Photoshop formats.

In addition, the PowerLook 2000 ships with PhotoPerfect Master, an image-processing and color-calibration application developed by binuscan of Monaco.

UMAX said the PowerLook 2000 will compete with the $5,500 DuoScan from Agfa, a division of Bayer Corp., based in Ridgefield Park, N.J. (see 06.10.96, Page 31).

UMAX Technologies Inc. of Fremont, Calif., can be reached at (510) 651-4000 or (800) 562-4000; fax (510) 651-8834; http://www.umax.com. □

Multimedia
From Page 14

machines than its closest competitor, Packard Bell Electronics Inc. of Sacramento, Calif.

However, the worldwide market for multimedia computers — defined as sound-, video- and CD-ROM-capable machines — more than doubled in 1995, exploding from 10 million units sold in 1994 to more than 20 million.

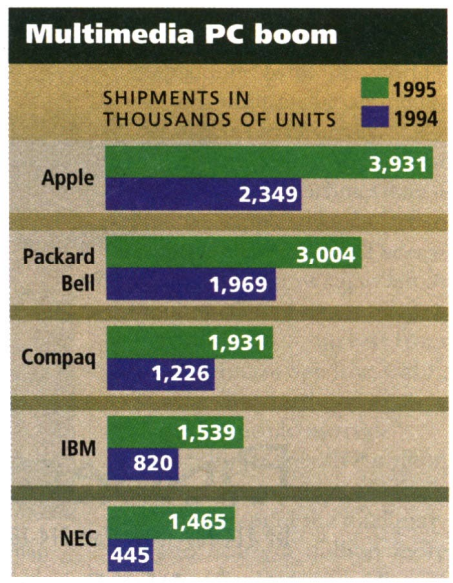
In terms of market share, the survey said, Apple slipped from owning 22.9 percent of the worldwide market to 18.8 percent, losing 4.1 percent of its share.

The big gainer was NEC Corp. of Tokyo, whose market share grew nearly four percentage points from 1994.

Bruce Ryon, Dataquest principal analyst, multimedia worldwide, said Apple continued to dominate because of its integrated multimedia architecture.

"[Macs] were designed from the ground up to be multimedia-friendly machines; x86 machines are still backing into it," he said.

Ryon predicted Apple may lose a little more market share in 1996 but will still dominate with about 15 percent to 20 percent. □



Source: Dataquest (June 1996).

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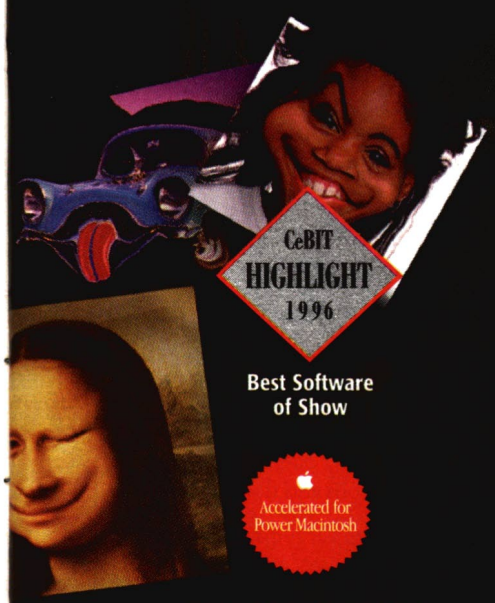

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Tropix 2.1 warms up

By Rebecca Gulick

Graphics users who want more flexibility in managing their images will soon be able to turn to an update of Alaras Corp.'s multimedia cataloging software.

Alaras Tropix 2.1, slated to ship in July, will feature enhanced import, export and search capabilities, the company said.

Version 2.1 will import custom fields from other third-party databases, such as Claris Corp.'s FileMaker Pro or ACI US Inc.'s 4th Dimension, and export data to programs such as Microsoft Excel or SAS Institute Inc.'s SAS System for reports or analysis. It will import an unlimited number of keywords and custom fields, Alaras said.

Version 2.1 will also let users import databases created with Cumulus, from competitor Canto Software Inc. of San Francisco.

To improve users' access to images from a variety of applications, Tropix 2.1 will create PICT versions of thumbnail images and place them on a hard drive rather than within a text file. It will then export a text file with the file names of the PICTs.

Tropix 2.1 will also be able to search any managed fields, including custom fields. It will include or exclude specific keywords, and users will be able to specify a minimum number of keyword matches.

Users will be able to import an entire Cumulus database via a screen in Tropix 2.1.

Like the current version, Tropix 2.1 will cost from $490 for a single user to $14,900 for a client-server version with remote dial-in capabilities. Upgrades will be free.

In other news, Alaras and Niwot Networks Inc. of Boulder, Colo., recently announced that Tropix is now compatible with Niwot's $1,295 MAC/SD Communication Kit, a high-speed, wide-area file transfer system. The combination lets Tropix users send high-resolution images between sites at ISDN and T1 speeds. Tropix's dial-in options were formerly limited to viewing.

Alaras Corp. of Durham, N.C., can be reached at (919) 544-1228; fax (919) 544-7772; http://www.alarascorp.com. □

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White Sands taps into After Effects

By Kelly Ryer

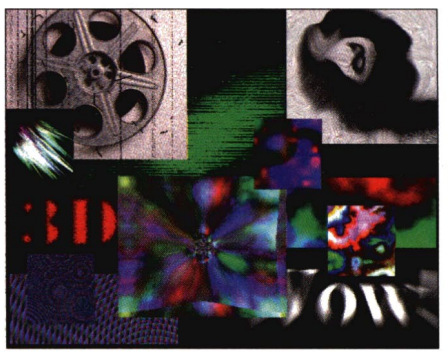
White Sands Multimedia recently entered the video-effects arena with Aurorix, a low-cost set of plug-ins for Adobe Systems Inc.'s After Effects.

The $89 package includes 26 plug-ins in several categories. Media-simulation modules make video look like old film or TV, and lighting effects add colored spotlights or motion blur. Distortion plug-ins twist and deform video, and pattern-generation modules perform two types of tiling. Texture-generation plug-ins include Chaotic Rainbow and SoapFilm.

"I like the AgedFilm plug-in, which is worth the price of the package by itself," said Richard Lainhart, technical director at O-Town Media of New York. "It can add a lot of dust, scratches and hair, or you can be more subtle with it.

"By adding a little grain and luminance jitter, you can really soften up the hard edges of video or animation," he said.

White Sands Multimedia of San Francisco is at (415) 563-4318; wsmedia@aol.com; http://www.sirius.com/~wsmedia. □



Aurorix effects include AgedFilm, Turbulent Flow, LightZoom, Infinity Warp and Flitter.

Pinnacle ups app ante

Acting to expand its role in digital video, Pinnacle Systems Inc. last week bought Gold Disk Inc.'s Video Director software line.

Meanwhile, Gold Disk announced that it has been reincarnated as Astound Inc.

Pinnacle's acquisitions from Santa Clara, Calif.-based Gold Disk include Video Director 2.5 for Macintosh as well as similar packages for Microsoft Windows. Pinnacle Systems, which paid $4.5 million in cash for the software, said it plans to combine Video Director with its own video-manipulation technology.

The $99 Video Director is a videotape-editing tool that uses an infrared cable to control a VCR and a camcorder. The software lets users cut and move video footage.

In other news, Gold Disk's management staff this month announced that it has formed a new company, Astound Inc., after purchasing Gold Disk's Astound multimedia presentation package. New versions of the Astound software will be announced in the next few months. □

CLIP ART BEAT

Appetizers. Image Club Graphics, a division of Adobe Systems Inc., of Calgary, Alberta, has dished up ObjectGear Volume 3 — Clay Buffet. The $99.99 collection offers 85 high-resolution RGB TIFF images of food items, all molded in clay. The 4-by-5-inch images come with embedded PostScript clipping paths and prebuilt "drop" and "cast" shadows. Phone (403) 262-8008 or (800) 661-9410; fax (403) 261-7013; http://www.imageclub.com.

Stocked up. Digital Stock Corp. of Solana Beach, Calif., recently shipped 12 CD-ROMs containing 1,200 photos in Photo CD format. The $249 discs include Active Lifestyles 2, Characters & Expressions, and Skylines of North America. Phone (619) 794-4040 or (800) 545-4514; fax (619) 794-4041; sales@digitalstock.com.

Industrial-strength images. Digital Textures LLC of Rockford, Ill., has forged a $149 two-disc set of backgrounds. Metals Collection includes 25 high-res, royalty-free images of diamond plate, brushed or rusted steel, copper, coins, and metal shavings. Also included are screws, nuts, bolts, gears and springs. Each image is available as a 38-Mbyte CMYK TIFF or 640-by-480-pixel RGB PICT. Phone (815) 967-0886 or (800) 254-9942; fax (815) 282-4068.

Vivid Victorian. Aridi Computer Graphics Inc. of Dallas recently announced a $149 set of 204 EPS images that hearken back to the Victorian era.

Volume 10, Ribbons, Banners & Frames, features hand-drawn illustrations of headings, scrolls and flourishes, and ornaments. Organized by color, each CMYK image comes with a black-and-white counterpart. Phone (214) 404-9171; fax (214) 404-9172.

— By Rebecca Gulick

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Adobe PostScript

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NETWARE BETA

A beta of Novell Inc.'s NetWare Client for Mac 5.11 is at http://netwire.novell.com/home/client/mac/macos511.htm.

Tapestry eases HTML

$69 Web editor speaks in tongues

By Joanna Pearlstein

Wannabe Web creators this month gained yet another option for HTML editing when Concept 1 Communications Inc. shipped Tapestry 1.1, a $69 HTML editor aimed at nontechnical users.

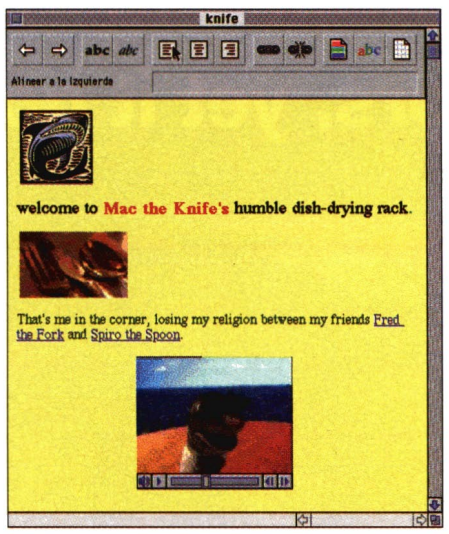
Tapestry is a WYSIWYG editor that lets users drag and drop graphics, text, audio and video clips directly into a Web page. With Tapestry 1.1, an update to the 1.0 version that shipped in March, Web designers can change the color of text and backgrounds using a menu option, and resize a graphic by clicking on the corner of its frame.

Basic HTML functions, such as font size and style, font and background colors, background image, line rules, alignment and hyperlinks, can be changed through menus and a tool bar. Additional tags can be added using the Foreign Tag feature, which lets users manually input the desired HTML tag. Users can also drag links from Netscape Navigator into Tapestry.

A Build-Site option will check a new page for broken hyperlinks, export the page as an HTML document and assemble all page elements for placement on a Web server.

Tapestry's multilingual features let users code their pages for the appropriate Web browser and view the application's menus and dialog boxes in German, French and Spanish.

Concept 1 said it would add support for tables and forms in Version 1.2, due later this summer.


knife
Alinear a la izquierda
welcome to Mac the Knife's humble dish-drying rack.
That's me in the corner, losing my religion between my friends Fred the Fork and Spiro the Spoon.

Concept 1's WYSIWYG HTML editor supports multiple languages and lets users drag and drop graphics, text, and more to a Web page.

Concept 1 Communications Inc. of Markham, Ontario, can be reached at (905) 305-8655 or (800) 292-7085; fax (905) 305-1281; sales@concept1.com; http://www.concept1.com. □

InterCon expands tcpConnect4 suite

New pricing plan crosses platforms

By James Staten

InterCon Systems Corp. this week will release a major update to its integrated Internet client.

tcpConnect4, an update to TCP/Connect II 2.1, starts at $495 and provides clients for e-mail, Web, Gopher, Usenet news, Telnet and Point-to-Point Protocol, as well as clients and servers for FTP, bidirectional printing and the Unix Network File System (NFS). NFS and bidirectional printing were previously provided through InterCon's NFS/Share and InterPrint products.

The e-mail client now displays graphics, sound files and QuickTime movies inline. It also parses URLs (uniform resource locators) as hyperlinks and supports MIME (Multipurpose Internet Mail Extensions).

A new autofill feature automatically copies the e-mail addresses of new senders into the address book. Mail actions let users sort, organize and automatically reply to incoming mail messages.

tcpConnect4's Web client sup-

See InterCon, Page 22

NEWSMAKER

Natural Intelligence CEO enjoys the taste of Java

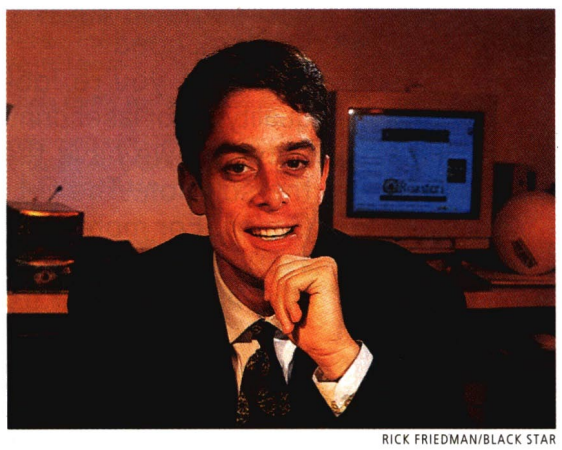
By James Staten

Apple surprised the industry in May by cutting a deal with Natural Intelligence Inc. to integrate the latter's Java technology into the Mac OS.

The company, which was previously known for its custom database consulting and a launcher utility, is providing strategic Internet technology to the Macintosh industry.

Natural, based in Cambridge, Mass., caught Apple's eye with Roaster, the first Java development environment to ship on the Mac. Yet Natural has not licensed Java from its inventor, Sun Microsystems Inc. Apple said it

See Newsmaker, Page 22



Natural Intelligence CEO Joshua Wachs is sitting pretty thanks to the surprise success of Roaster. "We didn't really think it could be its own little standalone business."

RICK FRIEDMAN/BLACK STAR

AOL to sport Internet look

By James Staten

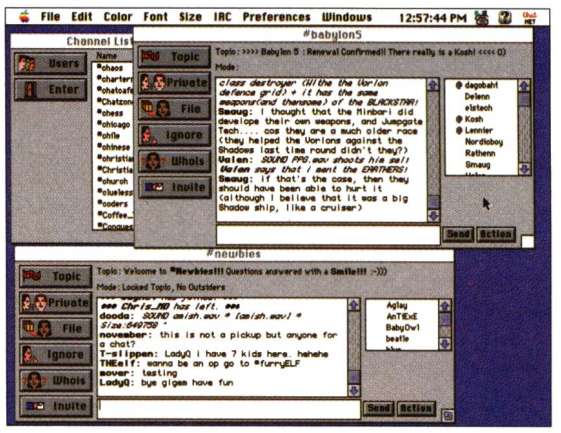
America Online is starting to look a lot like the Internet. Version 3.0 of the AOL client, previewed last week and due for the Mac this fall, will integrate Microsoft Corp.'s Web browser and deliver a host of new interface enhancements.

Chief among the changes is the end of delays when new artwork is being downloaded. America Online Inc. said the new client will progressively render new art and provide place-holder icons to let users make choices immediately.

AOL's e-mail will permit styled text in messages sent from AOL and will display URLs (uniform resource locators) as clickable hyperlinks.

Web users will no longer need to launch a separate application, as AOL's current browser requires. AOL will integrate Internet Explorer from Microsoft of

See AOL, Page 22



ELS' ChatNet IRC client lets users carry on multiple conversations in separate windows. It also works as an AppleTalk LAN conferencing solution.

ELS opens windows on chat

By April Streeter

ELS Inc. put a new, more user-friendly face on Internet Relay Chat this month. ChatNet, priced at $25, provides a multiwindow interface for one-on-one messaging, group conferencing and file transfers via Internet Relay Chat, or IRC. The program can also be used for LAN-based AppleTalk conferencing.

Longtime IRC user Stephanie Travis of Gainesville, Fla., said ChatNet lets users organize comments in different windows, enabling them to carry on multiple simultaneous conversations.

"If you've used a terminal program to do IRC, you know that keeping track of where and who text is coming from is difficult — it's just lines of text scrolling past," Travis said.

The software also provides security and administration tools to supervise employee communications. ChatGuardian lets managers screen words and phrases, as well as regulate admission to various conference rooms. ChatWatcher logs all conversations.

Ten- and 250-user licenses are priced at $99 and $499, respectively.

ELS Inc. of Gainesville, Fla., can be reached at (352) 375-0558 or (800) 443-7971; fax (352) 375-5679; elstech@elsinc.com; http://www.elsinc.com/~elstech.

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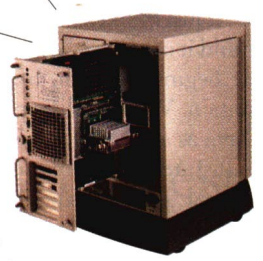

With a modular processor daughtercard, upgrading the microprocessor in your Network Server is a snap.

Choose from two models, the Network Server 500 and the Network Server 700. As you'd expect, the Network Server 700 offers more speed and expandability.

Apple Premium Server Reseller

Even more information is available!
Call 800-503-3855 to receive a list of Apple Premium Server Resellers plus detailed product information by fax, or surf your way on over to www.solutions.apple.com/netserver.

Each major component of the Network Server 700 can be accessed in about the time it takes to read just a few of these captions—60 seconds or less.

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Except this.

**WebStone is a freely available tool used to test the performance of HTTP servers. It is available via the web at http://www.sgi.com/Products/WebFORCE/WebStone/. **Prices may vary. See your local Apple Premium Server Reseller for information. ©1996 Apple Computer, Inc. All rights reserved. Apple, the Apple logo, AppleTalk and Macintosh are registered trademarks of Apple Computer, Inc. AIX is a trademark of International Business Machines Corporation, registered in the United States and other countries, and is being used under license. UNIX is a registered trademark of Novell, Inc., in the United States and other countries, licensed exclusively through X/Open Company, Ltd. All Macintosh computers are designed to be accessible to individuals with disability. To learn more (U.S. only), call 800-600-7808 or TTY 800-755-0601.*

Java-based servers aplenty

Biggest strengths are platform independence

By Stephan Somogyi

Five Java-based Web servers have emerged on the Internet in the past two months, each seeking to deliver the promise of platform independence.

Three of the servers — javaHTTPD from Daniel Ockeloen of Hilversum, the Netherlands; Cascade from David Wilkinson of Coventry, England; and Jigsaw from the World Wide Web Consortium (W3C) of Cambridge, Mass. — are available now. Jeeves from Sun Microsystems Inc.'s JavaSoft division of Palo Alto, Calif., is due in pre-release form later this summer, as is the final version of the single commercial offering, ExpressO, from Innovative Desktop Inc. of Camp Hill, Pa. (see 05.27.96, Page 12).

Since the servers are written entirely in the Java language, they should run on any platform where a Java Virtual Machine is available, such as the Mac OS. The servers can also be executed in a Mac-based Java development environment.

Jigsaw, posted last week in pre-release form, is the W3C's new reference Web server. It was created as an easily extensible server platform for use in testing future enhancements to Web protocols. Jigsaw is delivered in compiled form and with its Java source code, so developers can modify it for specific tasks.

javaHTTPD is also offered in compiled- and source-code forms with limited documentation. Cascade is available only in compiled form and has no documentation.

Jeeves was announced in May at Sun's JavaOne developers conference in San Francisco. It is being designed for free, noncommercial use and will support the latest server-side APIs for Java (see 06.03.96, Page 4).

The server-side APIs, called servlets, will offer a standard way of extending servers with programs written in Java, much as CGIs (Common Gateway Interfaces) are used to extend platform-specific Web servers. However, developers who have worked with the Java servers so far said their promised advantage of platform neutrality is not always true.

For example, javaHTTPD and Cascade were both written for Unix and make assumptions about the underlying operating environment, directory structure and the Java interpreter present.

These assumptions are not true on the Mac, and thus developers will have to makes changes to some of the code to get these servers to execute correctly on the Mac.

All of these servers suffer from poor performance, according to developers. Since Java is an interpreted language that does not run native on any given processor, it is inherently slower than a server written and compiled in C or C++.

Just-in-time (JIT) compilers should improve Java performance considerably; Symantec Corp. of Cupertino, Calif., released the first Mac JIT in May. Many developers are working on enhancements to the Java runtime model, which are expected to further improve performance. □

Where Java is now being served

Cascade (David Wilkinson)
http://www.netlink.co.uk/users/cascade/

ExpressO (Innovative Desktop)
http://www.capitalcity.com:4321/

javaHTTPD (Daniel Ockeloen)
http://www.vpro.nl/interaktief/java/beta/httpd/sources.html

Jeeves (JavaSoft)
http://www.javasoft.com

Jigsaw (World Wide Web Consortium)
http://www.w3.org/pub/WWW/Jigsaw/

AOL 3.0 will provide an enlarged group of categories, now called Channels, in a refreshed graphical window.

AOL

From Page 20

Redmond, Wash., directly into AOL 3.0 (see 03.11.96, Page 14).

Other interface changes will include a tool bar featuring buttons for some of the more popular areas of the service as well as a redesigned Welcome menu with additional categories.

To further help users locate new content, the Find feature will be enhanced. Also, users will be able to customize their start-up interface to reflect their personal interests.

Users trying to find each other online will gain Buddy Lists, a feature that will let them know when designated members come online.

In related news, AOL said its 20/20 pricing plan will go into effect July 1. Users who choose this plan will pay $19.95 a month for 20 hours of access, compared to the usual plan that includes five hours for $9.95.

AOL also signed a licensing deal last week with Macromedia Inc. of San Francisco for its Shockwave browser plug-in and Backstage HTML editor.

America Online Inc. of Vienna, Va., can be reached at (703) 448-8700 or (800) 827-6364; fax (703) 883-1509; stevecase@aol.com; http://www.aol.com. □

InterCon

From Page 22

ports Netscape Navigator plug-ins, frames and HTML 3.0 tags. Java compatibility is expected in a later release of tcpConnect4, the company said. The full suite supports drag-and-drop.

InterCon will sell four versions of tcpConnect4: Enterprise, selling for $495, provides all the tools listed above; Office, $295, contains the full suite minus the NFS and bidirectional printing features; Net, $115, consists of Office without its terminal-emulation capability; and NFS, $245, provides only NFS and bidirectional printing functions.

The product will be sold through what InterCon calls "Fluid Licensing." This will let a single site license various versions of tcpConnect4 for any mix of Microsoft Windows and Mac clients under one agreement and upgrade that license as required.

InterCon Systems Corp. of Herndon, Va., can be reached at (703) 709-5500; fax (703) 709-5555; info@intercon.com; http://www.intercon.com. □

Newsmaker

From Page 20

chose Natural for its expertise with Sun's language and the performance of its virtual machine and just-in-time compiler, the tools needed to run a Java applet on the Mac. But just who is Natural Intelligence?

CEO Joshua Wachs, 31, founded Natural Intelligence in 1987 when his work as a consultant for ACI US Inc.'s 4th Dimension database began to take off. In 1992, feeling that Natural was stalling, he replaced the staff with people "committed to building something together." The results were QuickCodePro, a 4th Dimension development tool, and DragStrip, one of the earliest in the wave of tool-bar utilities.

"We went from four to five people in 1992 to about 46 or 47 now," Wachs said. "We were born again, and it was really amazing."

Natural was drawn to Java in the summer of 1995 when its consulting division needed new development tools.

"The tools that were out there, such as 4D, Sybase, etc., weren't enough for us to create cutting-edge applications for our client base," he said. "So we decided to develop our own.

"One of our engineers here said, 'Hey let's base them on Java.' I'd love to take credit for it, but it was really the engineering department that pushed for it."

Natural built its tools without licensing Java from Sun because, Wachs said, "There was nothing to license from Sun when we started. We needed the virtual machine. It just didn't exist, so we had to build it ourselves."

In the beginning, Sun, based in Mountain View, Calif., promoted Java as a means for creating small Internet animations. But Natural pursued the language as a means for creating stand-alone, desktop applications. The company's work on tools was aimed at creating a professional-quality IDE (integrated development environment).

"Roaster Professional was the original goal," Wachs said. "Roaster itself was simply a little subset to get some free press. We didn't really think it could be its own little stand-alone business. I think part of it was also being in the right place at the right time — and a little bit of luck."

Wachs said the transition to becoming a developers tools vendor was a natural one. "We had started to use 4D on a lot of client-server applications without using the 4D back-end [server], but we realized 4D wasn't always going to cut it for us," he said. "That's why we decided to build Roaster Pro."

Wachs said he does not plan to move the company away from consulting. "We feel it gives us a strong edge on the product side of our business, and it's always been very profitable.

"Consulting helps drive new products because we have our own built-in focus group. All our products in the past, such as QuickCodePro and DragStrip, were developed because we had the need ourselves," Wachs said.

QuickCodePro, Natural's first product, was an IDE for 4D; it served as the framework for Roaster.

"The entire tool bar, editing window and IDE are all QuickCodePro core technology," Wachs said. The more mainstream DragStrip introduced Natural in 1994 to the retail software channel.

Roaster Pro is due later this year, but now Sun has endorsed Natural's sense of Java's potential to create stand-alone applications.

Wachs said he plans to stay ahead of the competition. "Our tools, our IDE in particular, are already way ahead of the other development environments on the Mac, so we will just make sure our tools stay way ahead."

Wachs said he does not see licensing Sun's Java as a necessity. "I'm not sure what it would gain us," he said. "We are already a defacto player in Java development without licensing it."

Natural's early lead in Java brought about the deal with Apple.

"Jordan Mattson [Apple developer tools evangelist] was a really big proponent of our products," Wachs said. "We said to Apple: 'We got this great product. You have to use it now to have the best time to market. Why not take the best from us and the best from Sun and go with it?' And that is what they did." □

The complete interview with Joshua Wachs can be found on MacWEEK Online at http://www.macweek.com.

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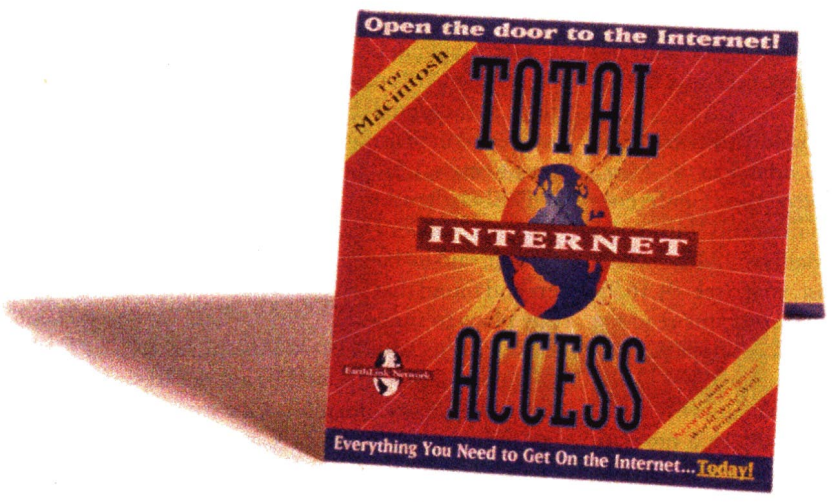

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RNS steps onto ISDN playing field

A new player in the ISDN game this month will ship a team of high-speed telecommunications products.

Aiming at the pre-press graphics market, RNS, a division of Meret Communications Inc., will release 128-Kbps and 256-Kbps ISDN adapters in PCI and NuBus flavors. The $995 dual-channel DataShuttle 128 will have one Basic Rate Interface (BRI) and transmit data at speeds up to 128 Kbps, while the $1,395 DataShuttle 256 will sport two BRIs and transmit data at up to 256 Kbps. Both cards require an external NT1.

RNS said its EasyISDN software, bundled with the products, will sense the type of switch being used by the user's telephone company and configure the ISDN card accordingly. An ISDN file transfer software package, FileMover Pro, will be included.

RNS will also sell the $500 DataShuttle Data/Fax Modem Kit, an add-on card for the ISDN adapters. In July, RNS will begin selling a $239 bundle of Internet software for use with the cards.

RNS, a division of Meret Communications Inc., of Santa Barbara, Calif., can be reached at (805) 968-4262 or (800) 262-8023; fax (805) 968-6478; sales@rns.com; http://www.rns.com. □

PowerTalk Manager 1.5 ships; few embrace it

By Stephen Howard

PowerTalk is dead, Apple has said, but that apparently does not preclude the release of new APIs.

The company reportedly distributed an updated PowerTalk Manager at May's Apple Worldwide Developers Conference in San Jose, Calif. Sources said Version 1.5 implements the Mailbox API, which Apple promised last year (see 01.16.95, Page 1). The APIs let programs read the contents of PowerTalk's desktop mailbox, forward mail, and file messages into a folder or delete them automatically.

The APIs also reportedly let a program read and modify the contents of a message (assuming the user has already been authenticated), and thus could enable work-flow and automatic mail-routing programs. Sources said the new APIs also let programs send data to each other, then read and delete the messages without user intervention.

Apple told developers and users in January that it was ceasing development on PowerTalk after 1.5. Instead, Apple will write an all-new integrated mail system based on Internet standards for Mac OS 8, code-named Copland (see 01.15.96, Page 16).

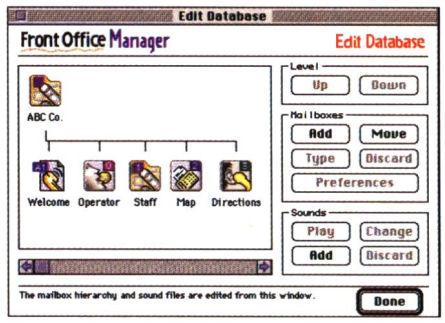
Users will not be able to take advantage of the new APIs until PowerTalk applications are updated, yet developers are not interested in revising their software to support Version 1.5.

Paul Gademsky, president of the International PowerTalk/PowerShare Users Group, said he has surveyed Mac developers and found that almost all have dropped any plans to support Apple's system-level messaging technology.

Quarterdeck Corp. of Marina del Rey, Calif., which provides most of the commercial gateways for PowerTalk, said it has no plans to update its products to the new APIs.

Mark Teixeira, software engineer at Jabra Corp. of San Diego, said: "We've lost all interest in what Apple's doing with PowerTalk. We have dumped this whole thing."

Apple was unavailable for comment. □



Pleiades Research's Front Office lets administrators design voice-mail and fax-back systems.

Front Office gets face lift, log aids

Pleiades Research Corp. has unleashed a new version of its voice-mail and fax-back system, Front Office.

Version 1.5 adds support for the company's Digital Storefront hardware; the Sportster Voice modem from U.S. Robotics Inc. of Skokie, Ill.; 4-Sight Fax from 4-Sight L.C. of West Des Moines, Iowa; and the GeoPort Telecom Adapter from Apple.

Pleiades has redesigned Front Office's interface and added a call log and a status screen that keeps track of calls, messages and fax-back requests. New fax-back features let users enter their voice as well as their fax numbers, and administrators can now block long-distance and international fax-back requests. The company said it would add support for additional voice-capable modems in the future.

Front Office 1.5 costs $299; upgrades from Version 1.2 are $49.

Pleiades Research Corp. of Los Angeles can be reached at (213) 257-1710 or (800) 737-8277; fax (213) 259-1728; info@plds.com; http://www.plds.com. □

NETWORK TRAFFIC

- **Sonic bridges Fast Ethernet**
- **BugMaster gets update**

Sonic Systems Inc. of Sunnyvale, Calif., last week shipped FastBridge 10/100, a protocol-independent Ethernet-to-Fast Ethernet bridge. Priced at $595, the unit features a twisted-pair port and thin-coaxial port for connecting to Ethernet networks, a single Fast Ethernet port, and LEDs to indicate which ports are experiencing data traffic. … **BF Communications Inc.** of Sumas, Wash., has released Version 8 of its software bug database. The BugMaster Database, priced at $100, is a broad catalog of bugs and fixes for commercial software on the Mac, Microsoft Windows and OS/2. Provided in HTML format for use on intranets, the database can be previewed at http://www.bugnet.com/~bugnet. … **Apple** this month announced it will bundle PC Card modems from **TDK Systems Inc.** of Nevada City, Calif., with its PowerBook 190 and 5300 systems in Europe. TDK's $529 Global Class is a 28.8-Kbps fax modem that is approved for use in many European countries, the company said. Users will select the appropriate country in TDK's country selector software. … In other modem news, **Zoom Telephonics Inc.** of Boston has released the Zoom/MultiLine, a fax modem designed for offices that need multiple modems. Due to ship this month, the Zoom/MultiLine includes four or eight 28.8-Kbps fax-modem modules. The eight-line version costs $2,995, but pricing for the four-line version was not set at press time. … Alameda, Calif.-based **Farallon Communications Inc.** has rolled out an Ethernet card for the education market. The $76 EtherMac LC Comm Slot Card is a 10BASE T card that fits into the Communications Slot in Mac LC and Performa systems. An upcoming thin-net version will cost $89. □

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MacTemps has job openings all over the country. Here are just a few:

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Web Designer
Design a home page and an entire site. No programming, just design. Site is for a national PBS television show and will include graphics & screen captures from the show for a hi-tech look. Work on a project basis. Starts in 2 weeks.
Job# 1214 **$17.50/hour**

Technical Support
Technical support for 200 Mac users in a corporate setting. Novell network experience is a plus. 9 month assignment. Begins ASAP.
Job# 6588 **$19/hour**

Boston, MA

Web Designers/Masters
Java, HTML, CGI, Quicktime, Shockwave, other video/audio, web & multimedia technologies. 2-5 years in graphic design with an agency. UNIX helpful.
Job# 13870 **$18-30/hour**

Interactive Media Specialists
Professional experience in Macromedia Director's Lingo scripting, Shockwave, 3D modeling, VRML, expert knowledge of interactivity a must. Know Oracle Media Objects, HyperCard, Visual Basic. Cross platform a must. Should have experience with CD-ROM development. Must have samples.
Job# 13870-1 **$25-35/hour**

Database Developers & Programmers
Cross platform senior level developers with strong skills in FoxPro/Visual FoxPro, C++ or Visual Basic.
Job# 37219 **$30-50/hour**

Tech Support Specialists
Mac OS >7.1 & PC (Windows 95). In-depth troubleshooting skills needed. Communication skills are crucial. Must have installed h/w, network devices & peripherals (scanners, artpads, RAM SIMMs, DIMMs, Ethernet cards, MPEG cards, sound cards). Address network, Internet issues. Experience with TCP/IP, modems and settings, remote access (dial in/out), and related software like First Class Client and ARA essential.
Job# 13870-2 **$18-30/hour**

Chicago, IL

Help Desk Support
Temp-to-perm opening for Mac and PC/Windows support in Advertising Agency. Primarily MS Office with some graphics software. Novell experience helpful.
Job# 10453 **$17/hour**

Cleveland, OH

Computer Technician/Programmer
Must know Basic, UNIX, COBOL, Novell, be able to support the MS Office Suite, and have strong general hardware knowledge.
Job# 844 **$40-80/hour**

Cleveland, OH (cont.)

Support Specialist
Macintosh hardware support and repair for computer sales company.
Job# 820 **$30K/year**

Dallas, TX

Web Programmer
HTML programming. Perl and CGI. Experience with UNIX servers, PageMill, and Hot Metal Pro desired.
Job# 5106 **$20+/hour**

Denver, CO

C++ Programmer
Must know comm toolbox, file system, open doc (PowerMac & 68k programming). Must have written a minimum of 50,000 lines of code. In Colorado Springs.
Job# 4648 **$30-40K/year**

Detroit, MI

Database Developer
Immediate temp-to-perm position. Complete the development of an invoicing system in 4D. Must have excellent communication skills and be able to target clients' needs.
Job# 35571 **$25/hour**

Houston, TX

Technical Support
Work for a "Big Six" accounting firm. Mac platform. Troubleshoot h/w, s/w. Work with PowerBooks. Some DOS/Windows. Support MS Office and TCP/IP.
Job# 3667 **$30-35K/year**

Los Angeles, CA

Technical Support
In Creative and Admin. depts of architectural design firm. Support AutoCad, networking, UNIX & graphic design software. Fast paced environment.
Job# 15399 **$18-25/hour**

Miami, FL

CGI/AppleScript Programmer
Ongoing project work to develop backend links to databases. Mac server environment. HTML programming a plus.
Job# 1092 **$25-45/hour**

Systems Engineer
Prepress environment. Pre/post sales support and customer service skills essential. Strong Mac troubleshooting and networking (AppleTalk and Ethernet) skills necessary. PC skills a plus.
Job# 1042 **$28-35K/year**

Tier II IT Help Desk
On-site support for a division of an international corporation. Broad Mac software knowledge needed. Ethernet and Mac TCP/IP necessary. PC skills a plus.
Job# 1123 **$16-18/hour**

New York, NY

PowerBook Technical Mavens apply!
We have temporary positions available for those with internal upgrade experience, DTP support, and cross-platform network knowledge.
Job# 25038 **$20-22/hour**

Help Desk
Temporary positions available for Mac generalists. Excellent opportunity for Junior Techies and future SuperTechs. Mac OS knowledge must be superior. Application support varies. FileMaker Pro essential.
Job# 25099 **$25-27/hour**

Philadelphia, PA

Relational Database Programmers
Temp position working with FileMaker 3.0 in Bucks County.
Job# 5860 **$21/hour**

Web Page Designers
HTML/Photoshop users. Temp position in Bucks county.
Job# 5853 **$15-22/hour**

Java/HTML Web Programmers
Temp position in Chester county.
Job# 5787 **$15-22/hour**

Philadelphia, PA (cont.)

Computer Field Technician
XPress, Photoshop, Illustrator problem-solvers. 2 people needed for perm positions in Montgomery County.
Job# 5823 **$35-40K/year**

Mac/UNIX Technician
Knowledge of UNIX a must. C++ and UNIX-based experience preferred. Perm opportunity in Delaware County.
Job# 5712 **$35-40K/year**

Phoenix, AZ

FileMaker Programmer
A consulting firm needs someone with 3.0 experience and proficiency in developing relational databases.
Job# 914 **$30K/year**

Database Programmer
Entry level position with highly-respected software development firm. C, C++ needed. Experience with 4D highly desirable (Oracle, Sybase backends). Both Mac and DOS platforms a plus.
Job# 1112 **$30-40K/year**

Technical Support
Phone support. Knowledge of desktop publishing and Mac OS needed. Tucson headquarters supports branches nationwide. Light travel. Some on-site troubleshooting.
Job# 1129 **$30K/year**

Product Manager
Desktop publishing environment. Tucson firm looking for expert knowledge of desktop publishing hardware and software and marketing of same. Experience managing a service bureau or similar business is best.
Job# 1130 **$35-45K/year**

Peripherals Testing/Troubleshooting
Phoenix firm needs a think-on-your-feet troubleshooter to test and repair used peripherals for resale.
Job# 1131 **$35K/year**

San Diego, CA

Network Administrator
LAN admin, operations management, and systems analysis. Experience with IBM mainframe-based Client/Server projects required. Strong knowledge of various platforms and communications protocols also required. 5+ years experience supporting UNIX and IBM environment.
Job# 4224 **$45-65K/year**

Technical Support Technician
Growing publishing firm is seeking a technical support technician to support over 100 users in a predominantly Mac environment. Systems installation and troubleshooting required. Graphics or prepress background would be a plus. PC and Windows experience preferred.
Job# 4217 **$35K/year**

San Francisco, CA

Systems Administrator
Small all-Mac company. FileMaker 3.0 development. AppleShare & Ethernet configuration. Manage backup systems. Generate reports. Must be a good communicator and be able to work with non-technical personnel.
Job# 6422 **$20/hour**

Programmer
2-3 years experience in the commercial software industry developing Mac applications in C/C++. Work with Script Manager, TextEdit, WorldScript, and File Manager. Knowledge of Windows API and/or the Mac Toolbox.
Job# 6608 **$20/hour**

PC Tech Support
Troubleshooting, systems configuration and installation of h/w & s/w. Windows 95 & NT.
Job# 6854 **$18/hour**

PC Tech Support
Troubleshooting, systems configuration and installation. Windows 3.1, 95 and familiarity with NT Servers needed. Mac helpful.
Job# 6801 **$17/hour**

Schaumburg, IL

Mac Programmers
2 senior programmers needed. Work in C++. Take DOS-based Internet software and develop a Mac version. Internet knowledge is helpful, though not critical. Long-term project.
Job# 10527 **$30-50/hour**

Seattle, WA

Technical Writer
Write about online products.
Job# 5534 **$25-40/hour**

Software Testing
Win NT environment.
Job# 5541 **$20/hour**

Content Coordinator
Build custom MS Access database.
Job# 5537 **$20-40/hour**

Writer/Editor
Software documentation.
Job# 5551 **$25/hour**

Software Project/Program Management
Job# 5535 **$35-50/hour**

HTML Title Builder
Interactive online project.
Job# 5559 **$30-40/hour**

Technical Support
Locally owned company.
Job# 5529 **$30-34K/year**

RIP Station Operator
Work permanently for a silkscreen company in Kent.
Job# 5494 **$16+/hour**

Software Localization Engineer
Must understand C++ and DBCS issues.
Job# 5489 **$25+/hour**

Software Design Engineer
In-depth knowledge of C/C++ programming, SQL server, LBLIB, and relational database modeling.
Job# 5491 **$40+/hour**

Project/Program Manager
Work for MSNBC on-line.
Job# 5475 **$40+/hour**

Technical Support
Permanent 2nd tier support position with a graphic design firm downtown.
Job# 5426 **$38-42K/year**

MIS Manager
Work permanently for a local CD-ROM developer.
Job# 5286 **$41-56K/year**

Silicon Valley, CA

Mac Programmer
Digital Camera developer needs several Mac programmers with some graphics knowledge. Using C++, MPW and Code Warrior. Need to know QuickTime, QuickDraw and Drag & Drop tools & menus.
Job# 4284 **$40/hour**

Mac Specialist
Supporting hardware/software for a law firm. Networking, Word, and Excel skills. Good communication skills required and troubleshooting ability needed.
Job# 4422 **$20/hour**

Tech Support Engineer
Support emulative software. Answer tech inquiries by phone, email or fax. Must know Mac, DOS and Windows 95.
Job# 4432 **$15/hour**

Web Page Designer
HTML programming and CGI scripting for the completion of backend programming.
Job# 4426 **$40-50/hour**

Silicon Valley, CA (cont.)

Help Desk
Professional phone skills necessary. Troubleshooting and configuring. Premiere experience a plus. Possible temp-to-perm opportunity.
Job# 4298 **$18-22/hour**

Web Page Designer
Mac, Windows NT, Sun and UNIX experience needed. Some HTML programming (HTML tagging, Java and CGI scripting). Manipulate and digitize video. Seeking an outgoing candidate with a good sense of humor.
Job# 4376 **$28-34/hour**

Software Testers
Test children's educational software for the Mac at a Peninsula development house.
Job# 4459 **$15-20/hour**

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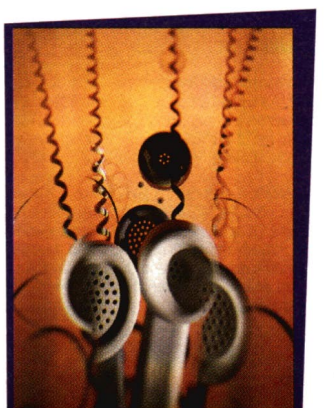

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BPA INTERNATIONAL

Best Macs yet?

The clone makers are killing Apple in all the right ways. Our recent review of UMAX Computer Corp.'s SuperMac S900L gave the latest entry into the Mac-compatible market an overall score of four diamonds (see 06.03.96, Page 29). Apple's nearest competitor, the Power Macintosh 9500/150, garnered only three diamonds when it was evaluated in these pages (see 04.22.96, Page 1).

How did the youngest Mac clone maker outperform the font of Mac technology with its first product? According to our reviewer, it did so with "creative engineering" and "imaginative new features" while beating the price of the 9500 by $800.

Last week we published a news story about some of the Macs we can expect to see unveiled at Macworld Expo in Boston next August. The most intriguing will not be from Apple. Power Computing Corp. will likely be the first company to ship a 200-MHz PowerPC Mac. And a 240-MHz version. Both should be ready later this year. Apple will be lucky if it gets a 200-MHz system to dealers before year-end, let alone a 240-MHz Mac.

Then there's DayStar Digital Inc., which continues to innovate its multiprocessor line while Apple — despite having licensed DayStar's multiprocessing API — stays on the sidelines.

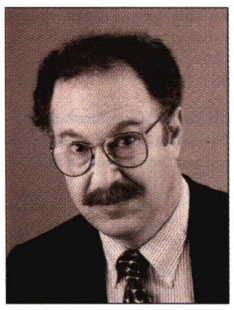
The Mac market is slowly evolving into a truly competitive world akin to the Intel-standard realm. This will create turmoil and confusion as Mac models proliferate and prices fluctuate. We already have our first clone casualty in Radius Inc., although its technology resurfaced in UMAX's new line.

As many expected, Mac clone makers are building products for Apple's core markets of publishing, digital video, multimedia and other high-end enclaves. They are leapfrogging Apple's technology quickly and offering compelling alternatives to sophisticated users.

Apple will need to innovate even more to stay abreast of its new competitors. The result should be some great Macs from a variety of sources. □

THE SECOND DECADE HENRY NORR

PPC doesn't need MMX, but does need an answer



I stand corrected. MMX may not stand for "multimedia extensions." Several readers wrote in with alternatives. Unfortunately, they didn't agree with each other, but the most plausible suggestion was "matrix math extensions." According to Intel Corp., however, the letters are not an acronym at all, just a brand name.

Whatever it stands for, there's mounting evidence that MMX is something Apple and its PowerPC partners need to take seriously.

Challenge

When I first heard Intel's claims about how these new instructions would improve video, audio and image-manipulation performance on future Pentiums, I took them with several grains of salt. The Wintel camp has been making noises like that for years, but the Mac has always retained a clear lead in these areas. When PC Magazine columnist John Dvorak suggested that MMX "may well turn the Intel-based PC into the graphics community's machine of choice," I just chuckled.

But I paused a bit when I read an analysis in the Microprocessor Report, where Editor in Chief Linley Gwennap — a man not generally given to hyperbole — wrote: "These new instructions will provide PC users with a highly visible performance boost on many of today's most performance-critical applications" and "give Intel a leg up on competitors, such as PowerPC, that are lagging in adopting similar technology."

Then I talked with Bryan Lamkin, director of graphics products at Adobe Systems Inc. He said tests with an MMX-savvy version of Adobe Photoshop that are now under development show an eight-times acceleration in most major processor-intensive functions. That's after the data is already in memory; when you factor in I/O and other real-life overhead, users will typically see a speedup in those functions of two to four times, he estimated. That's nothing to sneeze at. Even more ominously, Lamkin said he's seen nothing to match MMX coming from the PowerPC camp.

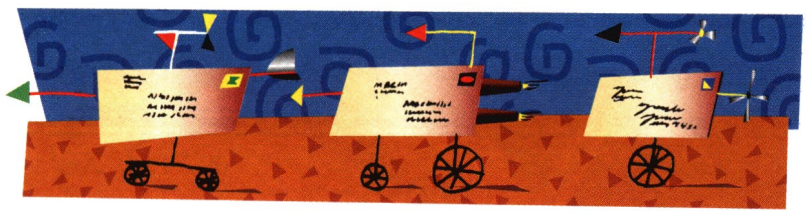
Response

Since then I've heard similar tales from developers in the multimedia field. Some even report that Intel is offering to fund the rewriting of their products to take advantage of MMX.

The danger here is not that the Mac will lose its franchise in publishing and multimedia overnight. But with its other advantages narrowing, Apple can ill afford to ignore Intel's advances — nor the marketing hype sure to surround them next year.

How should Apple and its PowerPC partners respond? Simply copying MMX wouldn't make sense, but the situation calls for more than a gesture. Maybe the PowerPC would benefit from the addition of some different graphics-oriented instructions — the PowerPC equivalent of Sun Microsystems Inc.'s "VIS" extensions to Sun's SPARC chip. Perhaps there are better answers. But some action should be taken so the PowerPC side does not get caught flat-footed when the MMX tide hits the marketplace. □

Henry Norr, editor emeritus of MacWEEK, welcomes feedback in the MacWEEK forums on CompuServe or at henry_norr@macweek.com.



LETTERS

Completely confused

In response to PC specialist John Wong's letter to MacWEEK (05.27.96, Page 21), I agree that there are confusing choices in processors for Macs (for example, Power PC 601, 603, 604, 603e and 604e). Wong says there isn't this confusion on the Intel-standard side. So, I am converted. I am turning in my Mac and getting a PC. Which one do you suggest? I want a good one, but not too expensive. Should I get one with a Intel 386, 386SL, 386DX, 386SLC, or maybe a 486, 486SX, 486DX, 486DX2, 486DX4 or 486DX60? Or should I get a Pentium, or maybe a Pentium Pro? I think I'm confused.

I agree, the Mac line has been too confusing for too long. But the PC market is far more confusing. PCs are not only more difficult to use, they are more difficult to buy.

Michael Simone
Technical support representative
Global Village Communication Inc.
Sunnyvale, Calif.

Nix Apple OS e-mail

I agree with Don Crabb about the importance of e-mail on the Mac (06.03.96, Page 19). As he points out, neither Apple nor Microsoft Corp. has been able to build e-mail into the OS. I think that Apple should stop trying. There is an abundance of third-party e-mail products — both client-server, such as our own Quarterdeck Mail (formerly Microsoft Mail for AppleTalk Networks) and CE Software Inc.'s QuickMail, and POP clients, including Qualcomm Inc.'s Eudora and Claris Corp.'s Emailer.

Apple's Cyberdog team has said it's planning to open the mail part and allow access. If Apple gives developers a chance, we can build world-class products and continue to make the Mac a great computer.

Avi Rappoport, product manager
Quarterdeck Corp., Berkeley, Calif.

Mac managers unite!

Thank you for The Mac Manager column in the 05.27.96 issue (Page 21). As a Mac manager and graphic designer, I find it difficult to keep up with all the new technologies and updates and keep everything running smoothly in our office of 30 Macs and one PC.

Is there any hope that Apple will create an organization like Crabb's Apple Worldwide Mac Managers Association? I would love it! We have had a hard time finding knowledgeable support for the Mac in our area. And the ones we find are spreading themselves too thin to provide the detailed troubleshooting that we occasionally need. So, I am stuck with trying to find answers in magazines like MacWEEK or from friends in the business. Please tell Apple that we really need something like the AWWMMA.

Melinda Raber Johnson, Mac specialist
Miller Brooks Inc., Zionsville, Ind.

User unfriendly

In a letter to MacWEEK (05.27.95, Page 21) Dave Meltzer, group product manager for Mac applications of Microsoft, wrote: "In the past, we required customers to supply a program disk or original title page ... to qualify for upgrade pricing. ... Now the software ... will not install unless it detects a qualifying prior version."

Oh, swell. This is supposed to be less burdensome? Let's say I try to do a clean re-install of Microsoft Office and have to re-format the drive for whatever reason, but the new package won't install because there's no prior version on the drive. Oh, of course, I'll go find all the original disks and re-install them, and then install the upgrade. Ahhhhh, so easy. Thanks a bunch. Why not copy-protect the dang thing while you are at it?

Robert Howe, programmer
Lunetta & Sun, Placerville, Calif.

Overlooked

In the 05.06.96 issue you published the "MacWEEK Guide to Digital Imaging," covering digital cameras (Page 25). I was disturbed to see that Minolta Corp.'s RD-175 camera was not covered, nor was it listed in the section on digital field cameras on Page 30.

This is all the more curious, since we are referenced in the article on Page 32, stating that the Agfa ActionCam "is a standard Minolta RD-175." This indicated to me that the author was at least aware that we develop and market a digital camera. We feel that the RD-175, at a list price of $9,995, represents a combination of exceptional value and quality in a professional digital camera, and your readers should be fully aware of all of the choices available to them in this product category.

Glenn W. Magnell
Vice president and general manager
Marketing and Product Planning division
Minolta Corp., Ramsey, N.J.

How to contact MacWEEK

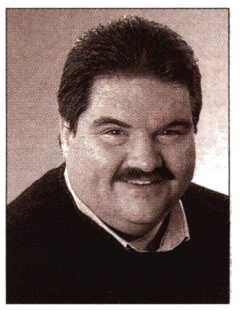
Send letters to MacWEEK, 301 Howard St., 15th Floor, San Francisco, Calif. 94105; fax (415) 243-3651. We can be contacted online: CompuServe, 76077,1351; Internet, letters@macweek.com. Include your name, address and phone number. We reserve the right to edit for clarity and length.

THE MAC MANAGER DON CRABB

Mac managers group needs Apple counterpart

I recently proposed the creation of the Apple Worldwide Mac Managers Association (see 05.27.96, Page 21). Since then, I've been slogging through a deluge of e-mail and phone calls, with more than 95 percent of it favoring the immediate creation of AWWMMA. (A free MacWEEK mug to the person who comes up with a cooler name.) Most of these messages also proposed specifics on how an AWWMMA might be formed and operate.

Given this input, I've modified my original AWWMMA concept. In addition to the creation of this Apple-sponsored AWWMMA — not unlike the hugely successful Digital Equipment Computer Users Society — Apple should create its own internal group fully dedicated to the health and well-being of Mac managers.



Apple already has the institutional model in Heidi Roizen's Developer Relations organization. Constituting a Mac Managers Relations organization won't be easy, of course, and it would cost real money and resources. But it's long overdue. Without it, any Apple-sponsored AWWMMA would lack the internal Apple connections and clout to be effective.

Mac Managers Relations

OK, let's assume Apple decides to create this new group, which I'll call Mac Managers Relations. It will need a boss. That boss should be an Apple vice president and report to Chief Administrative Officer George Scalise, underscoring MMR's parallel importance with Roizen's group.

It will also need its own Apple Fellow equivalent to Guy Kawasaki, one who will do for Mac managers what Guy is doing for developers. Apple will have to search outside the company to fill this position, just as it is looking outward for its chief technical officer. This MMR Fellow must be a pure Mac Manager advocate, and he or she should also be the executive director of AWWMMA (officers will, of course, be elected by the membership), tying that group to MMR while not jeopardizing each group's independence.

MMR will need its own evangelists and support specialists who are trained to cover Apple's markets: small office, home office, K-12, higher education and business. In fact, I see the MMR organization as being essential to improving Apple's increasingly tenuous relationships to education and large-site businesses.

These two markets have been screaming the loudest about nonexistent service from Apple. MMR could easily help Mac managers with Apple-enhanced Web and intranet solutions, especially those prepackaged around the Network Server 500 and 700 and a new Network Administration Toolkit.

Unity through service

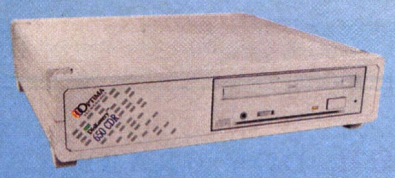
Another advantage of the MMR will be its ability to provide the company with a focal point. With MMR as an information clearinghouse, Mac managers will know that it can be the first stop for a service request. This focal point has been absent for, well, forever.

MMR will be charged with cutting through Apple red tape and establishing viable and affordable support programs. It will constantly focus Apple's attention on the needs of Mac managers. □

Don Crabb welcomes comments at his Internet address decc@cs.uchicago.edu. You can also check out his home page at http://cs-www.uchicago.edu/~decc/.

"Remember, you don't bring up Bob's PowerBook that freezes, and he won't talk about yours that burned up."

Comments? Ideas? Contact Eli at elitoons@aol.com



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FOR NEWS HOUNDS

The busiest Cyberdog-related newsgroup on Apple's Usenet server is news://cyberdog.apple.com/cyberdog.general.

Panorama 3 offers blistering speed, interface upgrades

By Christopher Hall and Carey Tews

But ProVUE's database-creation tool needs a major documentation overhaul.

Database creation is an essential task for many Macintosh consultants, value-added resellers and corporate workers. Developers using 4th Dimension, FoxPro, Omnis7, Oracle or FileMaker Pro revel in the organizational power, control and speed of their respective database engines, while smaller applications are often overlooked or trampled.

ProVUE Development Corp.'s third release of Panorama is the little engine that could, but it's no chugging choo-choo. The $295 Panorama 3.0 is a solid-fuel rocket of a database, boasting the awesome speed of a RAM-based database and new client/server connectivity features, and it is well-positioned to win new converts in the database development community.

What's new

Panorama 3 is the product of a decade of Mac development. Long lambasted for its lightweight file-sharing multi-user access, Panorama now offers connectivity to EveryWare Development Corp.'s just-released, excellent Butler SQL Server 2.0, which Panorama sells separately for $169.95.

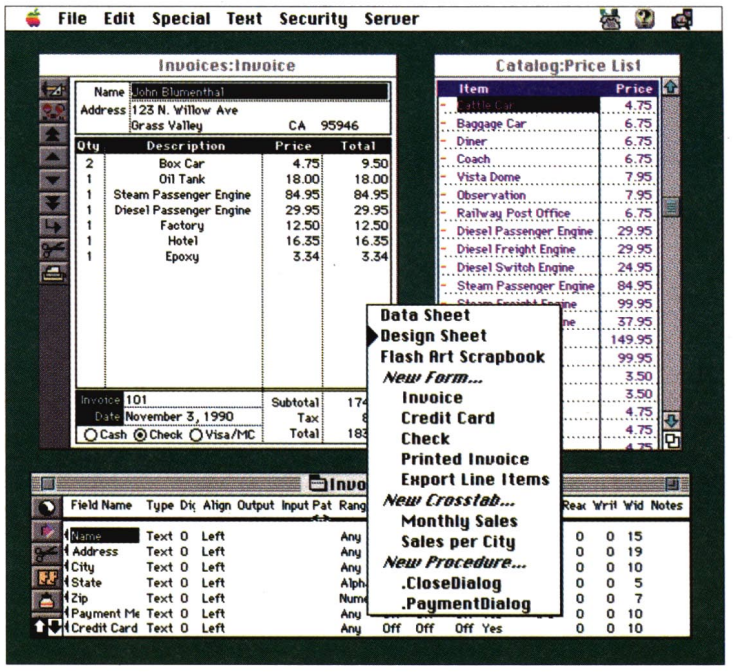
Along with gaining true record-locking multi-user functionality, Panorama 3/Butler users can now have databases larger than available RAM. Although not tested for this review, this "Partner/Server" offering is the single greatest improvement to Panorama. Users working on their own local database get the advantage of Panorama's tremendous speed, unencumbered by network limitations.

The Partner/Server concept buys more than just speed: Mobile users can unplug from the network and go their merry way with a copy of the database. When they reconnect to the server, synchronization takes place and records that were altered in both versions are arbitrated as the designer planned. This style of data replication has much less overhead and potentially fewer problems than other implementations, such as that in Lotus Notes.

But multi-user functionality isn't the only enhancement in Panorama. It is the first Mac database we've reviewed that incorporates automatic geometry management and color management. Using Elastic Forms, designers can support multiple screen sizes and bit depths without creating separate forms for each one. With Elastic Forms, the designer defines the manner in which fields and other screen elements move when the window is resized.

Automatic color management means that forms should look right in millions of colors or black and white with equal ease. Spending hours to make a series of separate data-entry forms for 17- and 14-inch color and 12- and 9-inch monochrome displays is a thing of the past.

With SuperObjects, Panorama extends its palette of interface elements for designers with such items as graphic, 3-D and "sticky" buttons; pop-up menus; and matrices. Other impressive SuperObjects include a built-in word processor (simplistic and quirky, but usable) and a text editor.



With ProVUE's Panorama, developers can easily create simple invoicing and price-list applications while still having quick design access to the basic elements of the database.

Scripting

Panorama also supports powerful scripting through its own language, PanTalk, and through AppleScript.

PanTalk can launch an AppleScript, and AppleScripts can access Panorama data or launch PanTalk procedures. PanTalk itself has been expanded with new built-in procedures and functions and an interactive debugger; it remains one of the richer database languages we've reviewed. Many poky, multiline functions in other database scripting languages reduce to short, fast

See Panorama, Page 31

SCORE CARD

Panorama 3.0 ◆◆◆◆

ProVUE Development Corp. **List Price: $295***

Hits: Blazingly fast imports and calculations; new multi-user performance with Butler SQL 2.0; automatic geometry and color management.

Misses: Documentation cries for major overhaul.

**Multi-user discounts available. Panorama Direct (runtime) is $90. Upgrades from Panarama II, $99.95.*

Key ◆◆◆◆◆ *Excellent* ◆◆◆◆ *Very good* ◆◆◆ *Good* ◆◆ *Fair* ◆ *Unsatisfactory*

Cyberdog has learned the basic commands

From Page 1

berdog Starting Point brings up a page of buttons that, in turn, launch an integrated Web, Gopher and FTP browser; a reader for e-mail or news; and a Log and Notebook for managing electronic addresses.

The pup's repertoire

These core capabilities have not changed since we examined the beta release (see 03.04.96, Page 1) and neither has our assessment: Though it doesn't offer all the bells and whistles of the leading specialized Internet utilities, Cyberdog as a whole is easy to use and fairly powerful.

The reader-editor for mail and news is particularly strong. Notable features include a system of rule-based Handlers for automated processing of incoming and outgoing messages and a fast and flexible full-text search option based on Apple's new V-Twin technology.

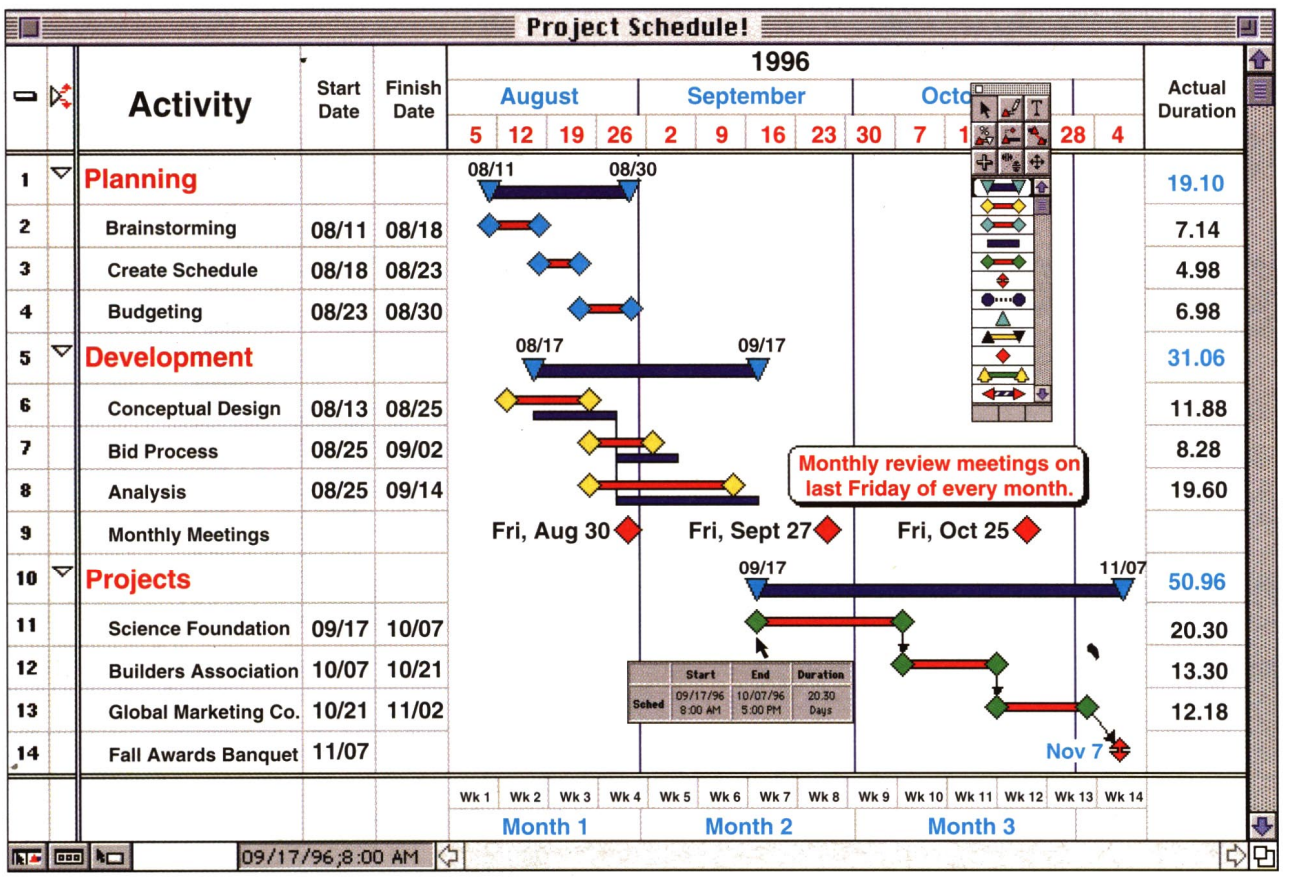
The program also supports the full MIME (Multipurpose Internet Mail Extensions) standard, enabling users to incorporate styled and colored text, graphics, audio, binary files, and other data types directly into their messages. This makes for impressive demos, but the problem we noted in our preview remains: Most other mail readers and gateways don't know how to handle such data. As a result, correspondents — in the case of newsgroup postings, the whole world — might find their mailboxes filled with such dog doo as garbled or duplicated messages, strange formatting codes within the text, and attachments that cannot be opened. We're glad to see Apple aggressively supporting an important standard, but we think it should have built in more warnings to alert users to its risks.

As Apple officials freely acknowledge, Cyberdog's browser is its weakest link, at least in comparison to the market leader, Netscape Navigator. In particular, it's slow at interpreting HTML code. Even when opening pages of only moderate complexity on a Power Mac 9500/120, we often found ourselves waiting for Cyberdog to format and display its contents *after* the download was complete. Navigator rendered the same pages almost instantly.

The browser has built-in players for audio and QuickTime and it supports

See Cyberdog, Page 33

You can't stay on schedule if you don't have one.


Project Schedule!
1996
August
September
Activity
Start Date
Finish Date
Actual Duration
1 Planning 08/11 08/30 19.10
2 Brainstorming 08/11 08/18 7.14
3 Create Schedule 08/18 08/23 4.98
4 Budgeting 08/23 08/30 6.98
5 Development 08/17 09/17 31.06
6 Conceptual Design 08/13 08/25 11.88
7 Bid Process 08/25 09/02 8.28
8 Analysis 08/25 09/14 19.60
9 Monthly Meetings 19.60
10 Projects 09/17 11/07 50.96
11 Science Foundation 09/17 10/07 20.30
12 Builders Association 10/07 10/21 13.30
13 Global Marketing Co. 10/21 11/02 12.18
14 Fall Awards Banquet 11/07
Monthly review meetings on last Friday of every month.
Fri, Aug 30
Fri, Sept 27
Fri, Oct 25
Nov 7
Start
End
Duration
Sched
09/17/96 8:00 AM
10/07/96 5:00 PM
20.30 Days
Wk 1 Wk 2 Wk 3 Wk 4 Wk 5 Wk 6 Wk 7 Wk 8 Wk 9 Wk 10 Wk 11 Wk 12 Wk 13 Wk 14
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3 Power

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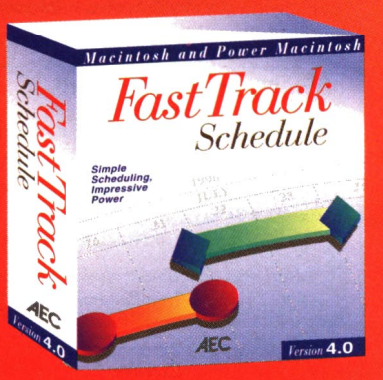
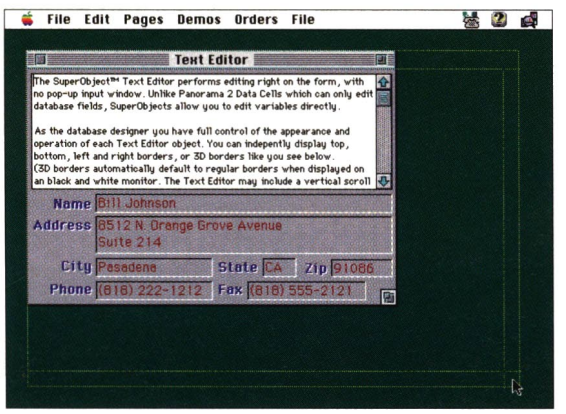


Panorama

From Page 29

PanTalk procedures.

Not new, but certainly worth mentioning, is the $90 runtime version of Panorama called Panorama Direct, which allows databases to be distributed to multiple users.


File Edit Pages Demos Orders File
Text Editor
The SuperObject™ Text Editor performs editing right on the form, with no pop-up input window. Unlike Panorama 2 Data Cells which can only edit database fields, SuperObjects allow you to edit variables directly.
As the database designer you have full control of the appearance and operation of each Text Editor object. You can indepently display top, bottom, left and right borders, or 3D borders like you see below. (3D borders automatically default to regular borders when displayed on an black and white monitor. The Text Editor may include a vertical scroll
Name Bill Johnson
Address 6512 N. Orange Grove Avenue Suite 214
City Pasadena State CA Zip 91086
Phone (818) 222-1212 Fax (818) 555-2121

Panorama's Elastic Forms feature allows this Text Editor SuperObject to be stretched. All fields will resize to fit the new window while retaining appropriate placement.

RAM-based power

Panorama has not left its RAM-based, flat-file roots, but it doesn't need to. Relational and disk-based databases aren't always better; likewise, flat-file, RAM-based databases aren't always worse. Instead of preserving data's relational integrity through database design, Panorama developers preserve it programatically via procedures written in PanTalk. The lack of the slowdown typical of relational databases combined with being based in RAM give Panorama its blistering speed. We've not tested a faster Mac database.

During a demonstration of sorting, transforming and importing data, our jaws dropped when a multiminute FileMaker Pro import-and-sort took a few seconds in Panorama. While some users express worry about Panorama keeping data in RAM, it can be safer than disk in many cases. How many developer- and CPU-hours have been spent repairing databases whose open files or indexes have been corrupted during a crash? With Panorama, only the data entered since the last Autosave is lost. This can translate into less downtime and lower costs. Claris Corp. and Helix Technologies boast of their admirable tools for data recovery, but Panorama needs no such utilities.

> Panorama 3 is the first Mac database we've reviewed that incorporates automatic geometry management and color management.

Downsides

With any product of such depth and richness, there are flaws. For Panorama, they are in the manuals. Instead of a cogent manual set that informs and educates a developer, ProVUE presents users with its Panorama II handbook, a separate Panorama 3 Supplement and additional supplements.

While these manuals may be acceptable for upgrade customers, new customers will be disappointed and annoyed at having to flip from book to book as they learn the basics of Panorama. (These same customers will be downright confused reading about such Mac archaeology as entering one's user name in the Chooser and references to MultiFinder.)

Continued distribution of the Panorama II handbook, which was released the month before System 7.0 in 1991, and an outdated help file are a disservice to customers. We implore ProVUE to update all of its documentation and make the hard copy improvements available at reasonable cost to registered users.

Recovering from manual shock, we found ProVUE's Programming Workshop CD to be utterly indispensable. It contained not only an updated On-Line Reference and beefed-up procedure editor, but also Adobe Acrobat files for every Panorama manual, including the add-on Real World Programming guide, the Partner/Server Handbook and the Security Handbook. Providing customers with the information online, even if the presentation is awkward, is laudable. Extra hard-copy manuals are available at reasonable cost directly from ProVUE.

Although we have not reviewed them here, ProVUE distributes many inexpensive templates designed for various vertical markets. ProVUE also publishes an integrated personal information management system called PowerTeam (written in Panorama), Version 2.0 of which will ship this year.

Support is available by calling ProVUE's toll-free support line and on America Online and ProVUE's First Class BBS.

Conclusions

As with any full-featured database, Panorama's complexity can be daunting — and occasionally quirky — especially because of its awkward manuals. Still, ProVUE has developed a fine application, a loyal cadre of developers and a good niche in the market. Anyone planning custom database work should assess Panorama 3 and see if it fits your needs and development style. New multiuser capabilities, improved design features and scripting enhancements, as well as its amazing speed, make it a real contender.

ProVUE Development Corp. of Huntington Beach, Calif., can be reached at (714) 841-7779 or (800) 966-7878; fax (714) 841-1479; provue@aol.com. □

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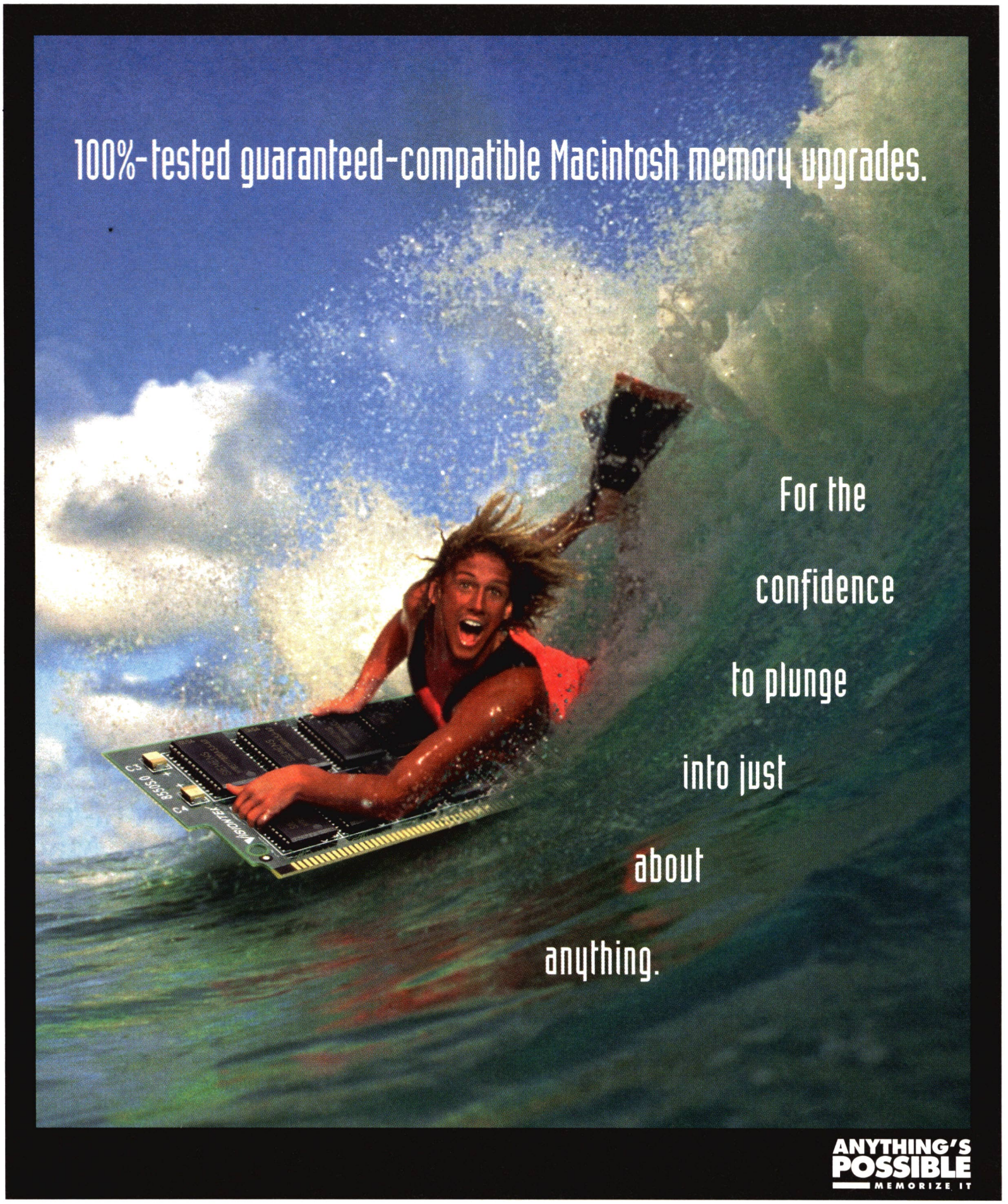

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VISIONTEK™

Cyberdog

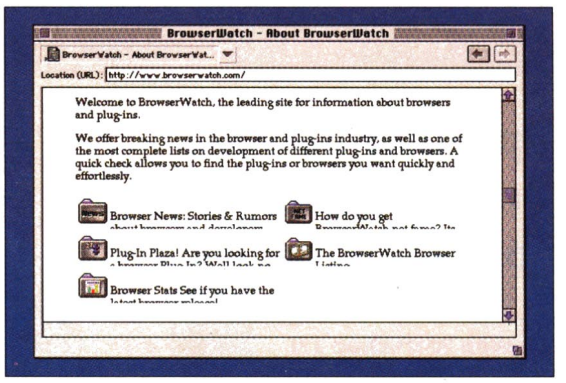
From Page 29

most Netscape extensions to HTML, but not frames or client-side image maps. In several situations, pages that looked fine in Navigator were not displayed properly in Cyberdog. And we frequently encountered an alert reporting that "An unknown error has occurred in OpenDoc or a part editor." The alert didn't occur with extensions off, but we have not yet been able to isolate the conflict. Otherwise, we experienced a few unexplained lockups and crashes, but no more than with other browsers.

Some glitches

Cyberdog's interface offers some nice, if nonstandard, touches: Tapping the space bar, for instance, cycles through new mail or news articles. In addition, some problems we noted with the beta have been fixed: Command-period or Escape, for instance, now cancel processes.

But other annoyances remain. Some settings, such as whether or not to leave mail on the default server, are hard to find. Some dialog boxes, such as Document Info, are incomprehensibly geeky. New mail doesn't automatically come to the foreground, and we found no way to call up the Starting Point screen except to dig through other open windows; the package badly needs a Window menu. And the absence of a Quit command — a quirk of OpenDoc — still strikes us as an attempt to make an obscure ideological point at the expense of user convenience.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Cyberdog's Web browser is slow to render HTML and doesn't support some Netscape extensions, including frames. In this shot of the BrowserWatch site, the text accompanying buttons (an HTML table) is clipped.

Conclusions

Cyberdog's real distinction derives from its component architecture. Users should be able to replace its parts with superior third-party alternatives, enhance its capabilities by adding new parts, and generate Internet-linked memos and reports by embedding Cyberdog buttons and windows into documents created in other OpenDoc container applications.

Until recently, these options have been strictly theoretical, since no supplementary parts or other container applications were readily available. That's still mostly true, but the picture is beginning to change: At least one new Cyberdog part is now available online (see story, below). And developers such as Claris Corp. and Digital Harbor Inc. have begun showing off promising new container applications. Also, Cyberdog 1.0 comes with a new container called Cyberdog DocBuilder, which gives users a few tools for authoring Cyberdog-savvy documents, such as custom alternatives to Apple's Starting Point.

Assuming these trends continue, it should soon be possible for users to begin taking advantage of Cyberdog's modular architecture. But for that to happen on a large scale, it's urgent that Apple deliver a 680x0 version of Cyberdog. Most Mac-based organizations — particularly in education, where the idea of Web-savvy documents is especially compelling — still have many 680x0-based machines and can't afford to invest heavily in a technology that will benefit only some of their users. Apple officials said they are actively working to make a 680x0 version "a possibility in the near future" but have not announced a timetable.

Beyond that, Cyberdog's fate, we think, lies in the hands of third-party developers; it thus depends largely on Apple's willingness and ability to give them tools, support and encouragement. By itself, Cyberdog is slick but is no revolution. If, however, other developers adopt it as a standard format for delivering Internet functions and a range of compelling containers emerges, it could well become an important mark of distinction for the Mac in the age of the Internet.

Apple is at (408) 996-1010 or (800) 767-2775; http://cyberdog.apple.com. □

SCORE CARD

Cyberdog 1.0 ◆◆◆

Apple **List price: Free**

Hits: Integrates the most popular Internet protocols; automated processing of mail and news; powerful search feature.

Misses: Web browser is slow and has problems rendering some pages; lacks support for some HTML extensions; interface quirks.

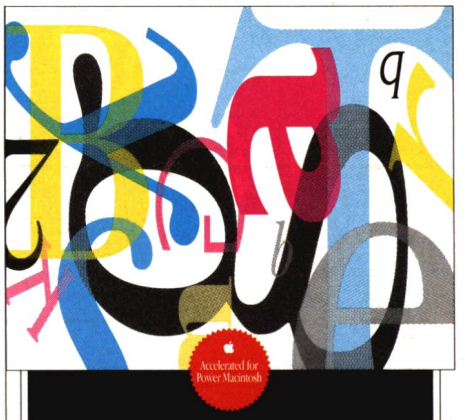
Outside developers chasing Cyberdog

The most important change on the Cyberdog scene has nothing to do with enhancements to Apple's existing components. The real news is mounting evidence that the technology could become an important vehicle through which other Internet software innovations will reach Mac users.

Just a few months ago Apple and the rest of the Internet-software industry appeared to be heading in opposite directions. While Apple touted the benefits of Cyberdog, most third-party developers were focusing on other component-software technologies: Netscape Communications Corp.'s plug-in architecture, which lets developers add new features to the popular Web browser; ActiveX, Microsoft Corp.'s OLE-based alternative; and Java, Sun Microsystems Inc.'s language that makes it possible to embed applets in Web pages to be downloaded to clients automatically and executed on virtually any platform.

Given all those choices — and the powerful companies and large installed bases behind them — we wondered how many developers would be willing to invest in the Cyberdog model, which for the foreseeable future runs only on the Mac. Fortunately, recent developments suggest they may not have to make that choice:

- **Plug-ins.** **At the Apple Worldwide Developers Conference in May, Apple demonstrated a prototype part that can host Netscape Navigator plug-ins within the Cyberdog environment. (The part was written for Apple by Jim Matthews, author of Fetch, the popular FTP utility.) Spyglass Inc., which commercialized the Mosaic browser family, has announced a tool kit offering similar capabilities. Plug-in developers will still have to compile their programs for the Mac — Windows-only plug-ins won't be available — but they won't have to choose between two architectures on the Mac.**
- **Java.** **Various developers are working on Cyberdog parts that will play Java applets. At WWDC, Apple showed one written by ResNova Software Inc. available from http://www.resnova.com. The part is extremely limited in its current form: It executes Java applets in a separate window, and even then some applets are unsupported. But ResNova is continuing to improve the part, and alternatives from other developers are expected soon. Later this year Apple is slated to add a Java Virtual Machine to the Mac OS, which should make it easy to support any applet with Cyberdog.**
- **ActiveX.** **Whether ActiveX will become an important factor in Internet-component development remains to be seen, but if it does, Mac users don't have to fear being left out in the cold. Microsoft has contracted with Metrowerks Inc. to implement the technology on the Mac. No timetable is available yet, nor are details about how the technology will be integrated with Cyberdog. — By Henry Norr**



WHAT TO DO WHEN

KORINNA CLASHES WITH

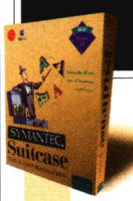
TIFFANY, BODONI

DISAGREES WITH GOUDY,

AND GILL AND

BASKERVILLE JUST CAN'T

GET ALONG.



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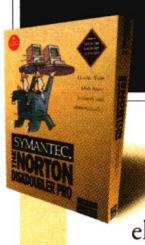

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MW ★★★★★ *MacWorld 1995*

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REVIEWS IN BRIEF

Specular bundles graphics tools for Web designers

3D Web Workshop 1.0 ♦♦♦♦

Specular International Ltd.'s first Web entry, 3D Web Workshop 1.0, is less a new product than a bundling strategy. Combining the company's TextureScape and LogoMotion applications with Adobe Systems Inc.'s PageMill and a new collection of Web-oriented graphics elements called WebHands, the $399 3D Web Workshop targets amateurs seeking one-stop Web authoring and professionals looking to augment their tools. Despite a few omissions and rough edges, the product largely delivers.

Getting to work

Creating a page in Web Workshop means creating a page in PageMill; the remaining parts of the suite extend PageMill's graphics capabilities and are integrated via drag-and-drop. PageMill 1.0 offers painless, WYSIWYG layout and text formatting and greatly facilitates creation of image maps and forms (see 01.08.96, Page 88). Drawbacks include lack of support for tables, stability problems and no advanced text handling tools. Version 2.0, due in July, should address most of these issues; the upgrade will be free to Web Workshop owners.

TextureScape's ease of use belies its power (see 04.08.96, Page 32). An astonishingly versatile source of textures, TextureScape is ideal for Web page backgrounds, while new text and polygon tools enhance its facility for 3-D buttons and other icons. You can even use the randomization controls to produce permutations on a theme or create a "family" of similar objects.

Unfortunately, there's no good way to cut out a rendered shape. You have to use a basic rectangular marquee tool, then make the excess background area transparent in PageMill. Since placement on the page is determined by the object's perimeter, imprecise cropping makes alignment of multiple objects tricky.

As its name suggests, LogoMotion's *raison d'être* is the animated logo (see 03.25.96, Page 35). Lathing and DXF (Drawing Interchange File) capabilities broaden its scope. LogoMotion will dither for you, even affording some choices of bit depth. Extruded text and other manifestations of the "3-D look" are arrows in its quiver.

The Web isn't the best showcase for flying logos because bandwidth and compatibility still make Web animations problematic. Animations cannot be added to your PageMill document via drag-and-drop. Further, neither TextureScape (which creates cool texture morphs) nor LogoMotion can export animated GIFs; you have to convert your output file via an included third-party utility. Conversely, to utilize QuickTime you must briefly enter the world of HTML. These maneuvers aren't difficult, but they are a step away from the point-and-click simplicity to which Web Workshop aspires.

A number of the 1,500-plus WebHands are genuinely useful, but the fact that they can be customized and tiled makes them stand out from other clip libraries. Users can access originating applications and source files, so modifications are generally easy. TextureScape converts text to outlines, so "editing" means creating a whole new shape (a somewhat clumsy process) and replacing the layer. The lack of grouping or flattening capabilities can make global changes to multilayered textures cumbersome.

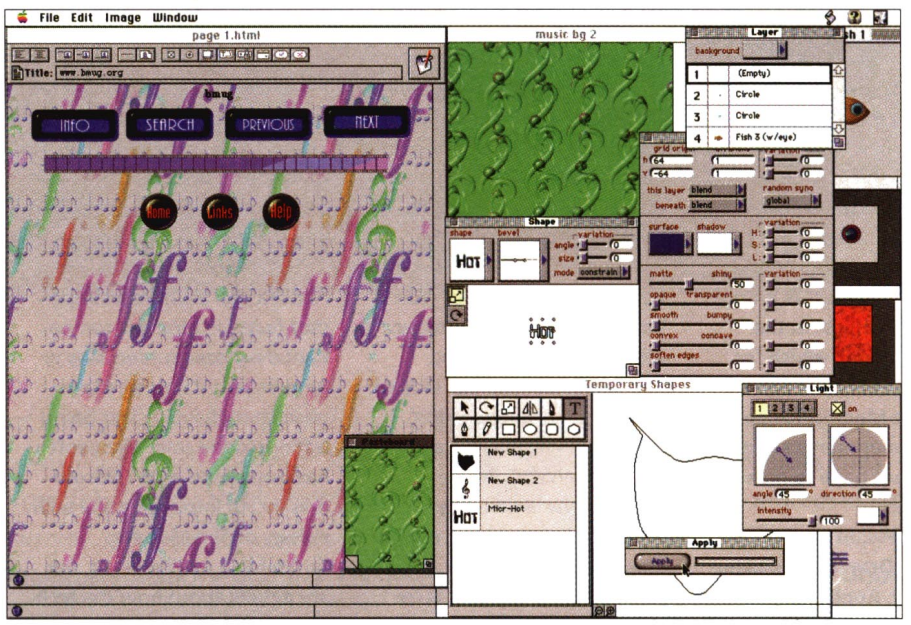
It's worth noting that the package has no provision for sound or exotic 3-D Web technologies such as QuickTime VR or VRML.

Conclusions

Overall, 3D Web Workshop is an excellent value. Though PageMill 1.0 lacks maturity, and the Specular applications don't wear their new Web hats with absolute conviction, each of the main components is a top contender in its field, and the WebHands are a definite plus. PageMill 2 can only solidify the product's position. Professional Web designers will find much that is useful, while amateurs will probably manage to create interesting pages entirely within the suite.

Upgrades for owners of PageMill, LogoMotion or TextureScape are $249.

Specular International Ltd. of Amherst, Mass., can be reached at (413) 253-3100 or (800) 433-7732; fax (413) 253-0540; http://www.specular.com. — *By David Hauer*



Full drag-and-drop integration in Specular's 3D Web Workshop requires at least two applications open at once. TextureScape is prone to screen clutter and quickly fills up even a 19-inch monitor.

Now's calendar app, contact manager add links to Web

Now Up-to-Date/Contact 3.6 ♦♦♦♦

Now Software Inc. is keeping a tight grip on its leadership in the Mac personal information manager market with its release of Version 3.6 of its network calendar Now Up-to-Date and contact manager Now Contact.

The bundle comes in two flavors: a $299 Web Publisher version and a $69.95 package without Web browser links. Both allow the calendar and contact programs to connect to servers via TCP/IP and to attach URLs (uniform resource locators) to events and contacts. However, the Web Publisher version also allows its public items to be viewed by Web browsers that support HTML tables.

Buttons in both programs let you display attached URLs within Netscape Navigator. In addition, Now Contact recognizes e-mail addresses by providing a button that will launch Navigator's Message Composition window. E-mail addresses in files created by previous versions of Now Contact are recognized in the new version.

We'd like to see the Now duo take advantage of programmer Peter Lewis' Internet Config to specify browser and e-mail programs. Now repeated a mistake it previously corrected in Now Contact: It left no visual indication that a calendar item has attached contacts, files or URLs.

With Web Publisher, users can serve Web pages either as HTML files via a Web server or directly from a calendar or contact server. They can also drag back the data from such pages into Up-to-Date or Contact via Versit's Virtual Business Card (vCard) specification. While there is no way to add data via a browser, a forthcoming Navigator plug-in should remedy that and circumvent the clumsy navigation imposed by HTML.

Now has done an outstanding job of making its PIM data easily accessible to the Web while allowing its Mac clients to incorporate Web data. It has transformed a cumbersome Web publishing task into a transparent extension of its products.

Upgrades to the Web Publisher version are $99.95. Upgrades to the standard package from Version 3.5 are $29.95; upgrades from Version 3.0 or earlier, $39.95.

Now Software Inc. of Portland, Ore., is at (503) 274-2800 or (800) 237-2078; fax (503) 274-0670; info@nowsoft.com; http://www.nowsoft.com. — *By Ross Scott Rubin*

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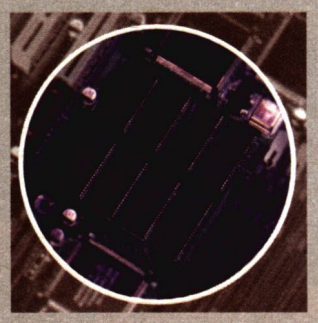
Introducing the SuperMac S900

Designed from the ground up specifically to meet the needs of the design professional. We've kept all the best things you like — the familiarity and ease-of-use of Mac OS and compatibility with all your favorite software — wrapped it all up with the raw power of a 604 150MHz PCI-based design and delivered it at a price that can't be beat. Many unique features of the new S900 have been designed to specifically eliminate performance bottlenecks that have long troubled the market.

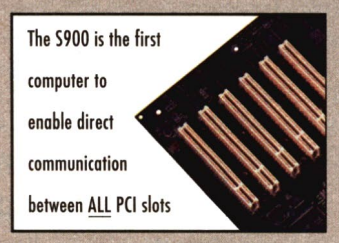


1 Interleaved Memory

Every S900 comes standard with 16MB of interleaved memory on the motherboard for fast memory access and best system performance. Others require the purchase of additional DIMMs to implement memory interleaved.

3 Exclusive PCI-to-PCI Bridge

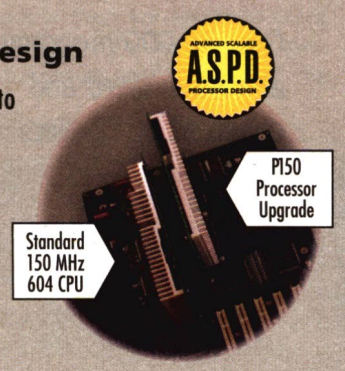
Not only does the S900 have an amazing 6 PCI slots, it is also the first to enable burst communication between them.



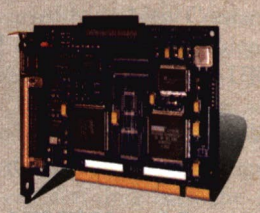
UMAX's exclusive PCI-to-PCI Bridge design enables direct communication between all PCI cards with the greatest performance, no matter which slots they're inserted in, also making it more expandable and easier to configure.

2 Advanced Scalable Processor Design

UMAX's exclusive A.S.P.D. provides easy upgradeability to dual processors or for higher speed processors as they become available. This modular configuration costs less and is far more flexible, allowing programs such as Photoshop to increase its performance up to 80% with the addition of a second processor card.



4 E100 I/O & Networking Card



To increase performance even further, UMAX offers the ultimate combination upgrade that gives you both Ultra-Wide SCSI and 100Base-T on one easy-to-install PCI card. The 100Base-T boosts data transfer over networks up to ten times the speed of standard 10Base-T connections. Ultra-Wide SCSI provides 16-bit wide data access at rates up to 40MB/sec. (4 times the speed of regular SCSI)

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* Suggested Retail Price

	UPGRADE OPTIONS		PRICE*
2	SuperMac E100	Extended Performance Ultra-Wide SCSI / 100Base-T	$495
3	SuperMac P150	604-150 ASPD Processor Upgrade	$995

* Suggested Retail Price

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PAPER IS CHEAPER

Scott McCready, a principal at IDC/Avante Technologies, says scanning old documents costs from 20 cents to $1 each.

DOCUMENT IMAGING

Paperless office still a goal, but reality remains elusive

By Erik Sherman

Imagine finding any important document — whether it originated on paper or electronically — in a matter of seconds and without leaving your desk.

This notion has helped create the appeal of document imaging and management, which promises a centralized approach to managing documents of all types: scanned images, word processing files, graphics and spreadsheets. Such systems are a far cry from attaching a scanner to your desktop machine and feeding in paper as fast as you can empty file cabinets. They often employ sophisticated mechanisms for storage, compression and security, and they require a serious commitment to implementation and use.

Most companies would probably admit that improving document control is desirable. The step between buying an application and actually implementing a solution, however, can be a big one.

"It probably sounds really glamorous and easy, but it is a lot of work and there is a cost associated with that," said Irene Loeffler, manager of records and image management at Genentech Inc., a biotech pharmaceutical company in South San Francisco, Calif. "There are people who need to manage [the system] and get the stuff in the system and do quality-control checks. It's not a cakewalk."

Loeffler said Genentech's system stores 5 million images relating to clinical studies of new drugs, reports and regulatory paperwork. While she praises the availability of information and the potential for electronic filings to the U.S. Food and Drug Administration, the company implemented the system with more immediate needs in mind.

"It's part of business process re-engineering: What are you planning to do when [all documents are] in electronic form?"

— Linda Myers-Tierney, International Data Corp.

"The system was actually justified because of disaster recovery," Loeffler said. Genentech authorized a pilot program after the October 1989 Loma Prieta earthquake. It considered a microfilm solution but decided against it because different sections of documents were often created at different times and the company wanted ready access.

Justifying the cost

A full document-imaging and document-management solution can be expensive, and cost justification is a critical issue. For example, Harris Trust and Savings Bank Inc. of Chicago has not expanded its initial document-imaging systems because it couldn't show enough pay back on the investment.

"We have one very old [imaging] application that we're utilizing, but we really haven't done much more," said Dennis Dwyer, vice president of technology facilitation. "There are several isolated areas that have come up, but we haven't been able to cost-justify the applications at this point." The bank has some systems for verifying signatures on accounts.

Scott McCready, a principal at IDC/Avante Technologies Inc. of Framingham, Mass., which follows the document-imaging market, agreed that cost justification is important, and he suggests it to his clients.

"You might need to do a formal return on investment. Even if you're not required to do it, absolutely do it," McCready said, because new management might want proof of a system's benefit. "We've seen people lose their jobs because two years down the road [a new boss was] second-guessing whether it was a good decision or not. You never know who will be your boss two years from now."

Concentration on cost is understandable because document imaging and management can require specialized software, high-end scanners and extensive storage media. Loeffler estimated that Genentech's initial system cost almost $250,000, including a server, scanner, printer, optical jukebox, licenses for scanning and viewing, and personnel dedicated to systems administration and scanning.

The documents that Genentech scans are regular paper documents. In New York, the Mount Sinai School of Medicine's initial foray into imaging has been for X-rays and magnetic resonance imaging scans (MRIs). The images require much higher scanning resolutions than the documents seen in most corporations.

"Ideally what these guys want to do is send [images] over the [Internet] to their colleagues, to a place to store them or to a place where they would create a presentation for them," said Lou Hernandez, Macintosh systems specialist at the school.

See Solutions, next page

JAMIE TANAKA

Irene Loeffler, manager of records and image management at Genentech Inc., is familiar with the difficulties of bringing users to a document control system. Genentech has stored 5 million images so far, yet it's a long way from being a paperless office.

GORDON STUDER

MACINTOUCH

RIC FORD

Taking a look at some great Mac software

Even as Apple's problems test the company and our faith in the Macintosh platform, there is an abundance of strength among small Mac developers. Our Mac tools are getting better and cheaper by the day, and the threat of a dark future managed by Microsoft Corp. and Intel Corp. is bringing the Mac community together with the aid of the Internet. Mac stability and complexity remain important issues, but the only platform that looks any better in that regard is the Newton.

This week, as a break from chasing and cataloging bugs, let's look at some software created in the original spirit of the Mac. These programs are personal picks, but there are many others like them. Compact, effective, creative applications are the soul of the Mac, and Apple's challenge is to facilitate their development at a pace that surpasses the Windows competition.

One of my favorite new programs is a simple freeware utility from Bryan Christianson (bryanc@ihug.co.nz). WhatRoute 1.1 is a Mac replacement for the Unix traceroute program, an essential tool for exploring Internet pathways and problems. It identifies each router between your Mac and another computer on a TCP/IP network and shows

See MacInTouch, next page

SOLUTIONS

From previous page

Equipment costs are fairly obvious, but labor costs can catch a company off guard. Dwyer of Harris Trust said he was surprised by the cost of creating the company's systems, where he said the most notable cost factor was development time. "Maybe the requirements were too strict, or the tool might have been too limited," he said.

Another labor consideration is how many documents need to be converted. McCready said: "Chances are, if you haven't looked at it in the last 30 days you aren't going to need it. There's a tendency to get carried away."

McCready said scanners aren't an area for budget tightening. "If you're up into the 2,000-to-3,000-scanned-images-a-day range, then document input is an art," he said. "People try to scrimp on scanners — that's the wrong equipment to scrimp on."

McCready suggested purchasing high-end scanners with at least one backup. These costs could pale in comparison to the retrofitting needed when a company's network can't accommodate its imaging needs.

Expanding bandwidth

James Pepin, executive director at the University of Southern California in Los Angeles, said it's also important to "make sure that if someone does an imaging application that there is enough bandwidth to do it." He suggested that companies plan bandwidth down every path that network images might travel and balance hub loads by noting the people who use the images most.

Mount Sinai's Hernandez, who sees 2- to 40-Mbyte files moving over a network, agreed. "Networks are one large system. If you are going to change those, it's an institutionwide thing."

Many companies, however, will not see major network problems. Craig Landrum, president of Blueridge Technologies Inc. in Flint Hill, Va., has seen many imaging installations. His company produces the system that Genentech uses.

"A lot of people, when they think of graphics, think of large [Adobe] Photoshop files, but that's not true in this industry," Landrum said. "The most common document is a scanned black-and-white image." He noted that an 8.5-by-11-inch page scanned at 200 to 300 dpi can compress down to a 25-Kbyte TIFF file. Decompression occurs on client machines where the documents are viewed.

Unless a company has a homogeneous network, compatibility is also a consideration; Pepin said interplatform considerations are difficult. He suggested that people work with an imaging application to verify that whatever they're working on can function on all the company's machines.

Another type of compatibility is in compression and image formats. Even a TIFF file, for example, has a slightly different structure on a Mac than on an Intel-standard PC running Microsoft Windows. Popular compression routines between the two platforms are different. Pepin said he thinks a company must have some level of compression and image format compatibility, "otherwise you have to start telling people that they have to have two or three machines on their desk, and that doesn't fly."

Unexpected clashes may occur when business processes meet computerized processes. What worked with a paper system may seem limited in an electronic world.

Linda Myers-Tierney, director of electronic workplace technologies for International Data Corp., a Framingham, Mass., market research firm, said, "It's really part of business process re-engineering: What are you planning to do when [all documents are] in electronic form?"

IDC's McCready pointed out that electronic documents open a new world because many people can have simultaneous access, whereas a paper-based process usually forces serial work, with each employee taking a turn. Adoption of new methods, however, need buy-in from everyone involved. "You can't force a new process and a new technology on people," she said. "That will overwhelm them."

One advantage of document management is it frees employees for other tasks. "Most of us spend 25 percent of our time tracking documents for a paper-intensive process," McCready said. "That role of tracking paper disappears. You free up a lot of clerical resources."

Virtual paper trail

Part and parcel with network considerations and operational processes is security. Because it is so easy to modify even graphics files, a document system must maintain extensive security. A number of tools allow this: file access permissions, digital signatures and audit trails. Revision control can keep a history of the changes made to a document, when they are made and who made them.

Security becomes an interesting question between corporations. One company could come into a legal dispute with an electronically altered document. Blueridge's Landrum said that while courts have examined computer audit trails in such disputes, the potential for litigation is a reason most companies keep at least some paper on hand.

"Anything can be counterfeited," he said. "Electronic, you can counterfeit paper. If you're poor at it, you'll be able to detect a counterfeit. If you aren't, you won't." □

Support in question

The Macintosh may be a graphical platform, but it falls short when it comes to document imaging and management. Users and industry analysts share this view fairly consistently, citing product marketing and technical problems with the platform.

"[Apple] had an edge seven or eight years ago, and they sat on it," said James Pepin, executive director at University of Southern California in Los Angeles. "A user interface is nice, but if you don't have the power of a real operating system behind it, it's a kludge."

According to Scott McCready, a principal at IDC/Avante Technologies Inc. of Framingham, Mass., "The image rendering is pretty deeply buried in the Macintosh. Even for people supporting a variety of clients, it has been more difficult to support the Mac than other platforms."

Technical considerations aside, there has been broad agreement that Apple had failed to position itself to take advantage of this market.

"Apple could have really used imaging as a way to differentiate the Mac. In some ways it was much better suited to imaging than Windows," McCready said. "Up 'till about 12 or 18 months ago, if you didn't have an Apple client, you were at a competitive disadvantage. Now, most people wouldn't bat an eye if you said 'We don't have a Mac client.' "

Craig Landrum, president of Blueridge Technologies Inc. in Flint Hill, Va., whose company develops Mac imaging products, agreed: "Apple hasn't paid any attention to document management, per se. It's frustrating when you don't get the support of Apple. In some ways they've been supportive, but when it comes to supporting our presence at the largest document-management show of the year, they're just not there." — By Erik Sherman

MACINTOUCH

From previous page

the location of the problem if one of the intermediate links is down. The whole thing is technical and Internet-centric, but the implementation is true to the Mac. A Web page at http://crash.ihug.co.nz/~bryanc/ has download links and details.

WhatRoute requires Open Transport, but it works with FreePPP (now at Version 2.5rf), as well as with the commercial MacSLIP 3.0.3 (see 04.22.96, Page 31).

Smooth spinner

Another Internet-related application, PageSpinner 1.1, is a full-fledged Web page editor with quality and elegance a cut above many commercial products, despite being distributed as shareware. PageSpinner's natural, Mac interface makes it easy to create Web pages and to add items to those pages. You see HTML tags in the editor and manipulate them in what the developer terms "semi-WYSIWYG" style. A click of an icon button saves changes and switches to your chosen Web browser to display the page. The application supports tables, forms and a rich collection of elements, noting the HTML dialect required for special tags. Apple Guide documentation and a helpful HTML Assistant feature are part of the package.

Jerry Åman (optima@algonet.se) at Optima System in Sweden wrote PageSpinner. The Web page at http://www.algonet.se/~optima/pagespinner.html has details and download links. Registration and shareware payments ($25 for a single-user license) are handled through Kagi Shareware at 1442-A Walnut St., No. 392-PL, Berkeley, Calif. 94709-1405. Fax (510) 652-6589; shareware@kagi.com.

Mark Wall's DOCMaker is a gem of a program for making electronic documents.

Maximal multimedia

Terran Interactive Inc.'s $189.95 Movie Cleaner Pro 1.2 is a well-focused commercial product that is true to the Macintosh tradition. Its purpose is analyzing and processing multimedia files, and it neatly churns through both audio and video, controlling all sorts of parameters for compression and conversion.

A built-in Movie Expert cuts through technical details if you want to get a job done quickly without studying QuickTime's fine points. The program is smart enough to pick up processing after being interrupted, and it can handle batches of files.

The latest version takes advantage of Apple's Sound Manager 3.2 in System 7.5.3 to support the compact IMA (Interactive Multimedia Association) 4:1 audio format and to add high-quality audio resampling — an important feature (see 10.23.95, Page 44).

Terran Interactive Inc. is at 2 North First St., Suite 215, San Jose, Calif. 95113. Phone (408) 278-9065 or (800) 577-3443; fax (408) 278-9063; info@terran-int.com; http://www.terran-int.com.

Docs delivery

Terran uses another great Mac program to deliver electronic manuals. Mark Wall's DOCMaker, which has been around for years, is a gem. It neatly packs text and graphics (and now multimedia data) into compact applications that function as stand-alone electronic documents. These files can range from simple read-me files to full electronic magazines.

Originally shareware, the latest versions are licensed at various price levels, depending on application. Wall's Green Mountain Software is at 9404 Valley Lane, Huntsville, Ala. 35803. Phone or fax (205) 883-0373; greenmtn@hsv.tis.net; http://www.traveller.com/~greenmtn/. □

Comments on MacInTouch are welcome at (508) 897-2621. Please address e-mail to ricford@macintouch.com on the Internet or 72511,44 on CompuServe. The MacInTouch home page is at http://www.macintouch.com/.

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APS Q 840 Quantum 840 Trailblazer	811MB 4500 rpm		$189.95	$259.95
APS Q 1280 Quantum Fireball II 1280	1222MB 5400 rpm		269.95	369.95
APS I 2160 IBM Ultrastar ES	2063MB 5400 rpm		479.95	579.95
APS MS 2000 Micropolis 4421	2047MB 5400 rpm		469.95	569.95
APS ST 4200 Seagate ST 15230N Hawk	4094MB 5400 rpm		889.95	989.95

APS IDE DRIVES FOR MACINTOSH

Model	Capacity/Features	Internal
APS Q 1280A Quantum Fireball II 1280	1222MB 5400 rpm (Fast ATA-2)	$229.95
APS ST 2140A Seagate Medalist ST32140A	2167MB 5400 rpm (Fast ATA-2)	349.95

APS POWERBOOK DRIVES

Model	Capacity/Features	Internal
APS Q 810 Quantum Europa	778MB 3800 rpm, IDE – Fast ATA-2	$339.95
APS Q 1.08 Quantum Europa	1037MB 3800 rpm, IDE – Fast ATA-2	429.95
APS I 1.2 IBM Travelstar DPRS-21215	1200MB 4900 rpm, SCSI-2	699.95

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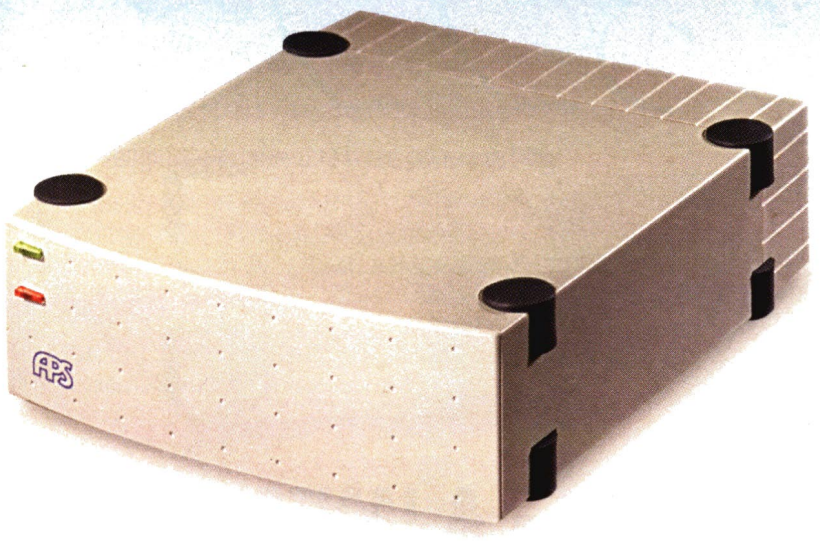

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MICROPOLIS

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APS MS 2.0AV Micropolis 4221AV	**1955MB** 7200 rpm		649.95	749.95
APS Q 2.0 Quantum Atlas XP32150	**2050MB** 7200 rpm		699.95	799.95
APS ST 2.0 Seagate ST 32550N	**2047MB** 7200 rpm		749.95	849.95
APS MS 4.0 Micropolis 3243	**4064MB** 7200 rpm		899.95	999.95
APS Q 4.0 Quantum Atlas XP34300	**4101MB** 7200 rpm		899.95	999.95

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Model	Capacity/Features	Awards	Internal	SR2000
APS MS 4.0AV Micropolis 3243AV	**4064MB** 7200 rpm		$999.95	$1099.95
APS ST 4.0 Seagate ST 15150N	**4094MB** 7200 rpm	MacWeek ★★★★	1099.95	1199.95
APS MS 9.0 Micropolis 1991	**8669MB** 5400 rpm		1899.95	2099.95*
APS MS9.0AV Micropolis 1991AV	**8669MB** 5400 rpm		1999.95	2199.95*
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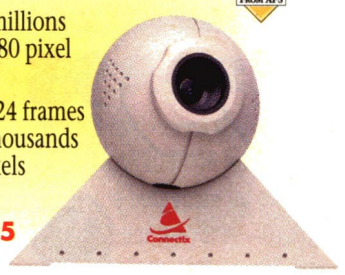

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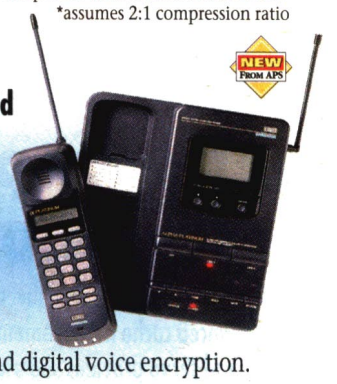

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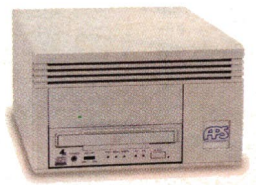

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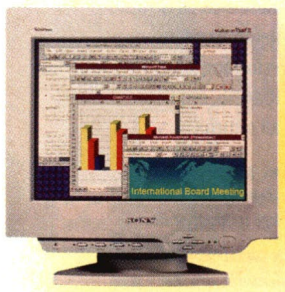

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Model	Features	Awards	Internal	SR2000
APS CD8 Pro	**8X-SPEED** Data transfer rates up to 1200KB per second!		N/A	$399.95
APS PD4	**CD-ROM/Removable Optical** 650MB optical storage with 4X CD-ROM in one device		N/A	499.95*
APS CD-R	**Recordable CD-ROM** FREE Discribe CD recording software ($350 value)		N/A	599.95*
APS CD-R Plus	**Recordable CD-ROM** FREE TOAST CD-ROM Pro recording software ($500 value)		N/A	899.95*
APS CD-R Pro	**4X4 Performance CD-R** FREE TOAST CD-ROM Pro recording software ($500 value)		N/A	1799.95**
APS CD-R Mastering System 2.0	4X read/4X write recording engine and a 2GB AV scratch disk		N/A	2499.95*
APS CD-R Mastering System 4.0	4X read/4X write recording engine and a 4GB AV scratch disk		N/A	2999.95*

APS MO DRIVES

Model	Capacity/Features	Awards	SR2000
APS 230MB MO	4500 rpm drive/230MB		$449.95
APS PD4	**CD-ROM/Removable Optical** 650MB optical storage with 4X CD-ROM in one device	N/A	499.95*
APS 2.6GB MO	4MB cache/2.6GB		1799.95

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Model	Capacity/Feature	Awards	Internal	SR2000
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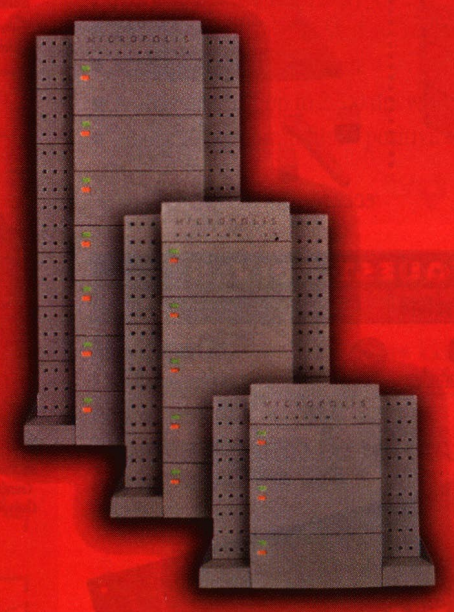

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MDLT4300/AV	4.3GB
MDLS9100/AV	9.1GB

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Capacity	Model No.	Mechanism	Seek	Warranty	Internal	PHASER-I
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1.05 GB	DT-51080	Seagate NEW LOW PRICE!	10.0 ms	3 yrs	$269	$344
1.0 GB	DT-1080FB	Quantum	11ms	3 yrs	$269	$344
1.05 GB	DT-31230	Seagate NEW LOW PRICE!	9.0 ms	5 yrs	$380	$455
2.0 GB	DT-32107	Conner NEW PRODUCT!	8.0 ms	5 yrs	$625	$699
2.0 GB	DT-4221	Micropolis	8.0 ms	5 yrs	$599	$675
2.1 GB	DT-32550	Seagate Barracuda II NEW LOW PRICE!	8.0 ms	5 yrs	$725	$800
4.3 GB	DT-14207	Conner NEW PRODUCT!	8.0 ms	5 yrs	$950	$1,025
4.3 GB	DT-3243	Micropolis NEW LOW PRICE!	8.5 ms	5 yrs	$975	$1,050
4.3 GB	DT-15230	Seagate Hawk 4 NEW PRODUCT!	9.0 ms	5 yrs	$899	$975
4.3 GB	DT-15150	Seagate Barracuda NEW LOW PRICE!	8.0 ms	5 yrs	$1,075	$1,175
9.0 GB	DT-1991	Micropolis NEW LOW PRICE!	12 ms	5 yrs	$1,950	$2,050
9.0 GB	DT-410800	Seagate Elite 9 NEW LOW PRICE!	11 ms	5 yrs	$1,925	$2,025

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Capacity	Model No.	Mechanism	Seek	Warranty	Internal	PHASER-I
2.0 GB	DT-4221AV	Micropolis NEW LOW PRICE!	8.5 ms	5 yrs	$650	$725
2.1 GB	DT-32550AV	Seagate Barracuda	8.0 ms	5 yrs	$725	$800
4.3 GB	DT-14207AV	Conner NEW PRODUCT!	8.0 ms	5 yrs	$950	$1,025
4.3 GB	DT-3243AV	Micropolis NEW LOW PRICE!	8.5 ms	5 yrs	$1,050	$1,125
4.3 GB	DT-15150AV	Seagate Barracuda	8.0 ms	5 yrs	$1,125	$1,225
9.0 GB	DT-1991AV	Micropolis NEW LOW PRICE!	12 ms	5 yrs	$2,050	$2,150
9.0 GB	DT-410800AV	Seagate Elite 9 NEW LOW PRICE!	11 ms	5 yrs	$1,975	$2,075

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2.1 GB	DT-4221W	Micropolis 4221Wide	5 yrs	$699	$799
4.3 GB	DT-15150W	Seagate Barracuda 4 Wide	5 yrs	$1,175	$1,275
4.3 GB	DT-3243W	Micropolis 3243Wide	5 yrs	$1,050	$1,150
9.0 GB	DT-1991W	Micropolis 1991Wide	5 yrs	$2,085	$CALL
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9.0 GB	DT-410800W	Seagate Elite 9 Wide	5 yrs	$CALL	$CALL

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8.0 GB	DT-3243WAV	Micropolis - Fast/Wide 3243AV (2)	4.0 ms	5 yrs	$CALL
18.0 GB	DT-1991WAV	Micropolis - Fast/Wide 1991AV (2)	4.0 ms	5 yrs	$CALL
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5-10 GB	Exabyte-8505	8mm	$2,150
15-30 GB	DLT-2000XT	DLT	$4,399

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Capacity	Model No.	Seek	PHASER-I
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1.3 GB	Maxoptix T-III	18 ms	$2,199

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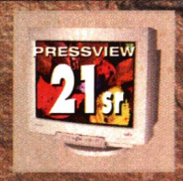

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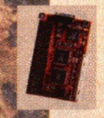

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Radius Pivot Card	SE/30	256	–	–	–
Xceed Color 30hr	SE/30	256	256	256	256
Lapis Color 16	SE/30	Thousands	Thousands	256	256
Lapis Color 24	SE/30	Millions	Millions	256	256
Radius Direct Color/gx	IIsi	Millions	–	–	–
SuperMac Spectrum 8	IIsi	256	256	256	256
SuperMac Spectrum 8.24	IIsi	Millions	256	256	256

Video Card	Platform	Monitor (Colors) 14/15"	16/17"	19/20"	21"
Radius FPD Card	Mac SE	Mono	–	–	–
SuperMac Superview	Mac SE	–	–	Mono	–
Radius TPD Interface	Mac SE	–	–	–	Mono
RasterOps 8/LC	LC/PDS	–	–	256	–
SuperMac Spectrum 8	LC/PDS	256	256	256	256
Lapis Color 16 for LC	LC/PDS	Thousands	Thousands	256	256
Micro Conversions 1724	LC/PDS	Millions	Millions	256	256
Lapis Color 24 for LC	LC/PDS	Millions	Millions	256	256

Video Card	Platform	Monitor (Colors) 14/15"	16/17"	19/20"	21"
Double Color SX	Nubus	256	256	16	–
RasterOps 708+	Nubus	256	–	256	–
RasterOps 24L	Nubus	Millions	–	–	–
RasterOps 8/LC	Nubus	–	–	256	–
SuperMac Spectrum 8	Nubus	256	256	256	–
Double Color LX	Nubus	256	256	256	256
Radius Direct Color 24	Nubus	–	–	–	Millions
E-machines Futura MX	Nubus	Millions	Millions	Millions	–

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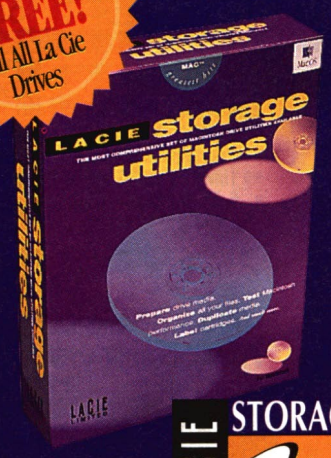

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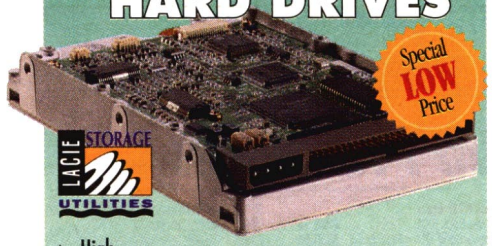

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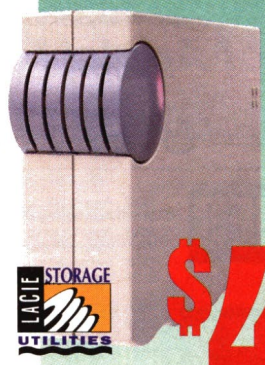

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1280MB Quantum Fireball	3 yr. warr.	$327
2160MB Ultrastar ES	5 yr. warr.	$499
4.3GB Quantum Atlas 7,200 rpm	5 yr. warr.	$929

POWER WIDE HARD DRIVES

- Utilize Wide-SCSI technology for high-speed, high capacity file transfer

FAST: 1 drives + 1 card

WRITE	7.0 MB/Sec
READ	7.7 MB/Sec

FASTER: 2 drives, 2 cards + RAID

WRITE*	13.0 MB/Sec
READ*	14.3 MB/Sec

FASTEST: 3 drives, 3 cards + RAID

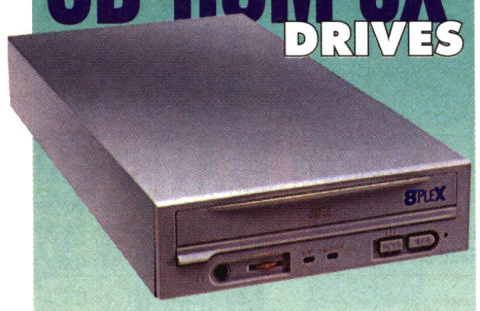
WRITE*	32.8 MB/Sec
READ*	27.0 MB/Sec

Power Wide External Drives

2.0GB Quantum Atlas Wide + Wide PCI Adaptec 2940 Board	NEW!	$1199
4.0GB Quantum Atlas Wide + Wide PCI Adaptec 2940 Board	NEW!	$1399
2.0GB Quantum Atlas Wide + RAID + Wide PCI Adaptec 2940 Board	NEW!	$1299
4.0GB Quantum Atlas Wide + RAID + Wide PCI Adaptec 2940 Board	NEW!	$1499

★ RAID Level 0 (Striped) For PCI Macs only

CD-ROM 8X DRIVES



- Fastest access speed available.
- Transfer rates up to 1200kb/sec.
- Smooth audio and video playback.

$299

8X CD-Rom

8X CD-Rom External $299

CD-R DRIVES

- Low cost media for backup.
- CD-Rs ship with Gear Multimedia software.
- Create your own CD with fast write capability.

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2X Recordable

CD-Recordables

2X Recordable with Gear MultiMedia	$699
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650 CD-R Disk 74 Minutes	10 Disk Pack $89

OPTICAL DRIVES

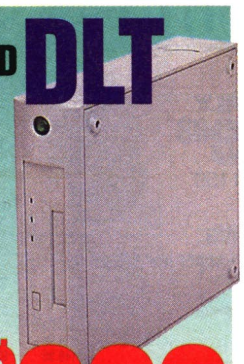
- Optical is the new standard in removable reliability.
- Available in two popular capacities.
- Compact storage convenience.

$1999

2.6GB Optical

230MB PowerBook Internal	1 yr. warr.	$399
230MB Optical Cartridge		$25
640MB External		$599
640MB Optical Cartridge		$49
2.6GB External	1 yr. warr.	$1999
2.6GB Optical Cartridge		$99

DAT AND DLT DRIVES



- The ideal medium for data backup.
- The cheapest backup solution per megabyte.

$899

8.0GB DAT DDS-2

DAT Drives Includes Retrospect

8.0GB DAT DDS-2 External	$899
8.0GB TURBO DAT DDS-2 External	$1089
30.0GB Quantum DLT External	$2999
40.0GB Quantum DLT External	$4999

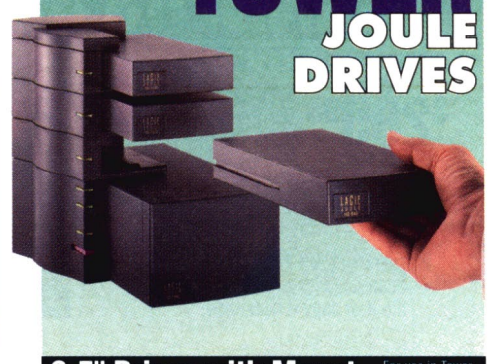
PORTABLE JOULE DRIVES

- Docking provides new security and backup solutions.
- Share hard disk-sized files with diskette convenience.
- Unplug and go for convenient data transport.

Joule 3.5" Drives with Dock

1280MB Quantum Atlas	3 yr. warr.	$469
2160MB Ultrastar ES	5 yr. warr.	$669
8.0GB DAT DDS-2 Includes Retrospect		$959

TOWER JOULE DRIVES



3.5" Drives with Mount For use in Tower with a Joule Base.

1280MB Quantum Atlas	3 yr. warr.	$469
2160MB Ultrastar ES	5 yr. warr.	$669
4.3GB Quantum Atlas	5 yr. warr.	$1099
8.0GB DAT DDS-2 Includes Retrospect		$959

Joule Bases – Supports Stacks Up To 6 Drives High

2160MB Ultrastar ES HD	3 yr. warr.	$699

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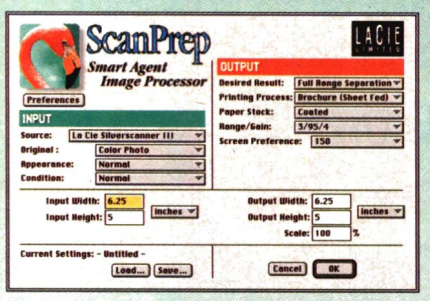
Highest Possible Rating

"No matter what acquired plug-in you get if you use Photoshop, you'll also want to buy a copy of ScanPrep."
– MacUser
Highest Possible Rating



FREE with all La Cie scanners, ScanPrep automates Photoshop's* image processing tools, individually preparing each image for printing right before your eyes. Simply describe the project to ScanPrep and scan the base image. ScanPrep yields professional prepress results, quickly and easily.

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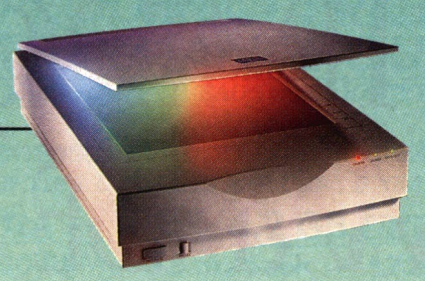

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4

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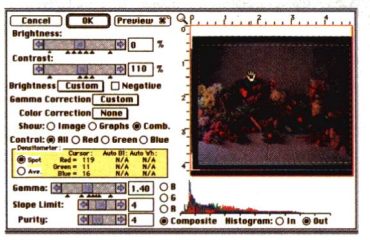
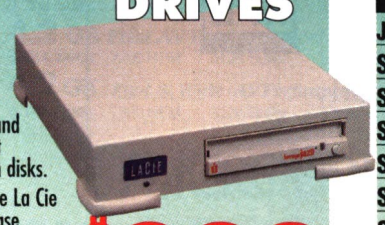


No matter which software bundle you choose, you'll also receive Silverscans' award-winning scanning software giving you professional scans.

* Full version only.

REMOVABLE DRIVES



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Syquest SQ400 44MB	$38 ea.	$37 ea.
Syquest SQ800 88MB	$42 ea.	$41 ea.
Syquest SQ2000 200MB	$62 ea.	$61 ea.
Syquest SQ105 105MB	$53 ea.	$52 ea.
Syquest EZ135 135MB	$18 ea.	$17 ea.
Syquest SQ3270 270MB	$49 ea.	$48 ea.
Optical 128MB	$16 ea.	$15 ea.
Optical 230MB	$21 ea.	$20 ea.
Optical 1.3GB	$59 ea.	$58 ea.
Optical 2.6GB	$85 ea.	$84 ea.
CD-R 74 650MB		$8.90 ea.
DAT 90m	$9 ea.	$8 ea.
DAT 120m	$24 ea.	$25 ea.
DAT Cleaning Kit	$9 ea.	$8 ea.
DLT 30 30GB	$40 ea.	$39 ea.
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540MB Quantum Internal (unformatted)	$129
720MB Quantum Internal (unformatted)	$149
1.2GB 5.25" Seagate External	$169
1.6GB Seagate Internal	$219
1400MB Quantum Internal 7200 rpm	$269
2151MB Quantum Internal	$419
REMOVABLE DRIVES	**PRICE**
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200MB SyQuest External	$299
270MB SyQuest External	$299

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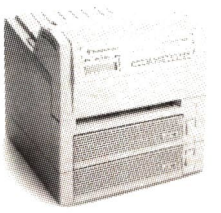

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540 MB IBM DESKSTAR

- 9 ms Seek
- 5400 RPM
- 128K Buffer
- 5 Year Warranty

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- 512K Buffer
- 5 Year Warranty

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MW ★★★★

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PDC2400
- **8 ms Seek • 7200 RPM**
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$725 Internal $785 External
Conner 21075 Mechanism

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11 ms Seek	5400 RPM	128K Buffer	3 Year Warranty		
1080 MB	***Fireball***			**255**	**315**
11 ms Seek	5400 RPM	128K Buffer	3 Year Warranty		
1280 MB	***Fireball II***			**265**	**325**
11 ms Seek	5400 RPM	128K Buffer	***5 Year Warranty***		
2.2 GB	***Saturn***			**520**	**585**
8.5ms Seek	5400 RPM	1024K Buffer	5 Year Warranty		
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8ms Seek	7200 RPM	1024K Buffer	5 Year Warranty		
4.3 GB	**Atlas**			**925**	**985**
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Fast & Wide SCSI AV Drives

2.0 GB ATLAS			**739**	**799**
8ms Seek	7200 RPM	1024K Buffer	5 Year Warranty	
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CONNER

1060 MB	***Quiet & Reliable***			**$265**	**$325**
9 ms Seek	5400 RPM	512 KBuffer	5 Year Warranty		
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8 ms Seek	7200 RPM	512K Buffer	5Year Warranty		
2.1 GB	***Fast & Wide -AV Performance***			**825**	**925**
8 ms Seek	7200 RPM	512K Buffer	5 Year Warranty		
4.2 GB	***Fast AV Performance!***			**975**	**1035**
8 ms Seek	7200 RPM	512K Buffer	5 Year Warranty		
4.2 GB	***Fast & Wide -AV Performance***			**1075**	**1175**
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Fast SCSI 2	8.5 ms Seek	7200 RPM	512K Buffer 5 Year Warranty		
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Fast SCSI 2	11ms Seek	5400 RPM	512K Buffer 5 Year Warranty		

SyQuest TECHNOLOGY

DRIVES			CARTRIDGES	
Capacity	***Model***	***External***	***Capacity***	***Price***
88 MB	SQ5110C	**$255**	**44 MB**	**$40**
135MB	SQEZ135	**195**	**88 MB**	**44**
200 MB	SQ5200	**325**	**135 MB**	**19**
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Featured Products

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8 ms Seek	7200 RPM	1024K Buffer	5 Year Warranty		
Seagate 9.0 GB	**Elite**			**$1965**	**$2065**
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Capacity	***Model***	***Media***	***Int.***	***Ext.***
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SyQuest Media

Part Number	Media	Qty 1	Qty 10	Qty 20
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S198 1011	**88MB**	$44ea	$43.50ea	$43ea
S198 1012	**200MB**	$69ea	$68ea	$67ea
S198 1013	**105MB**	$35ea	$34.50ea	$34ea
S198 1014	**270MB**	$57ea	$56ea	$55ea
S198 2010	**EZ135MB**	$19ea	$18.50ea	$18ea
S198 2011	**EZ230MB**	$30ea	$29.50ea	$29ea

SyQuest 5 YEAR Warranty

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CLUBMAC HARD DRIVES

Quantum

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TRAILBLAZER 850MB

14ms Access Time
Internal TrailBlazer
C104 0002

Capacity	Model	Part No.	Internal	Part No.	External
850MB	**Trailblazer** 14ms	C104 0002	$189	C104 0052	$249
1280MB	**Fireball** 12ms	C104 0001	$269	C104 0051	$329
2170MB	**Saturn** 8.5ms	C104 0011	$479	C104 0061	$539
2150MB	**Atlas** 8ms	C104 0004	$639	C104 0054	$699
4280MB	**Atlas** 8ms	C104 0005	$899	C104 0055	$959

ATLAS 4.3GB

7200 RPM
1024K CACHE

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Manufacturer's 5 Year Warranty

1280MB	**Fireball IDE**	C104 0012	$229		
1700MB	**Sirocco IDE**	C104 0009	$289		
2550MB	**Sirocco IDE**	C104 0010	$369		
FAST & WIDE DRIVES			**20MB/sec Data Transfer Rate**		
2150MB	**Atlas** XP32150SW	C104 0103	$699	C104 0152	$799
4280MB	**Atlas** XP34300SW	C104 0102	$999	C104 0153	$1099

Quantum IDE hard drives are compatible with Quadra 630, Performa 5200/5300, and Performa 6200/6300 Series

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ClubMac® Tape Back-Up Drives

C104 0900	**ClubMac 2-4GB SCSI QIC MiniCartridge Drive** (Cartridge not included)	$489
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C104 1301	**ClubMac 4-8GB DDS-2 DAT Drive**	$829
C104 1302	**ClubMac 4-8GB Performance DAT Drive**	$1079
S100 1043	**Sony QW3080XLF QIC/WIDE 2-4GB Cartridge**	$29
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ClubMac® 4.4X

Features:
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190ms avg access time
Caddy-less design

ClubMac®		Access time	Trans Rate	
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C104 1700	**ClubMac 4.4X-Speed CD-ROM Drive**	140ms	600k/sec	$169
C104 1400	**ClubMac Classic 2X CD-ROM Drive**	250ms	300k/sec	$79
NEC		**Access time**	**Trans Rate**	
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FEATURES

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- 21" .25m high performance DiamondTron display
- Color management support for AGFA FotoTune 1.0 & 2.0, Apple ColorSync 1 & 2, EFIColor, and Kodak Precision.
- .30mm Dot Pitch
- Energy Star Compliant

$2399

R016 1032

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FEATURES

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- Color management support for AGFA FotoTune 1.0 & 2.0, Apple ColorSync 1 & 2, EFIColor, and Kodak Precision

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R016 1034

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MultiScan 17SFII

SONY

FEATURES

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- Macintosh Adapter included
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S106 1018

Sony Multiscan 17SFII (S106 1018) $915
Sony Multiscan 17SEII (S106 1019) ... $1024

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E047 1019

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- Postscript upgradeable
- Text print speed up to 3ppm, color 1ppm
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E047 1022

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- Cross-platform compatibility

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HEWLETT PACKARD

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FEATURES

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- Dual I/O for either PC or Mac connect
- Black print speed up to 7ppm
- Color print speed up to 3ppm
- Handles plain and special papers, transparency film, and envelopes

NEW PRODUCT

H047 1065 HP DeskJet 855CXI InkJet Printer.... $499

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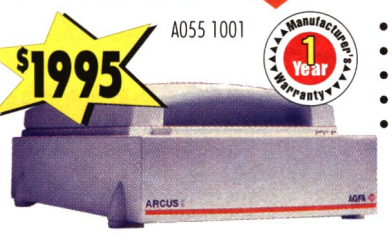
A055 1001



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16MB 70/60NS	137/142
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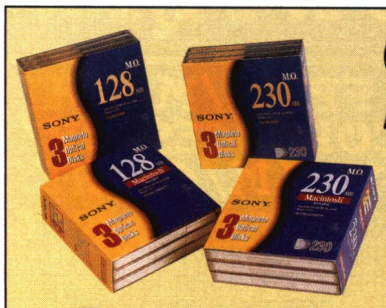

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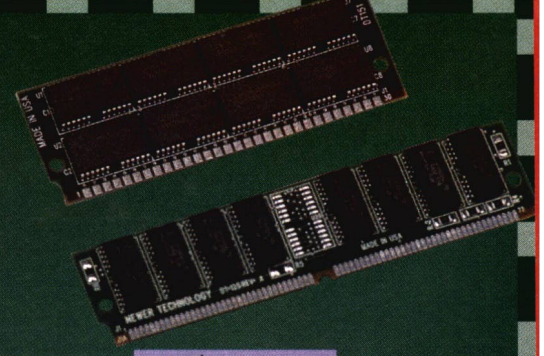

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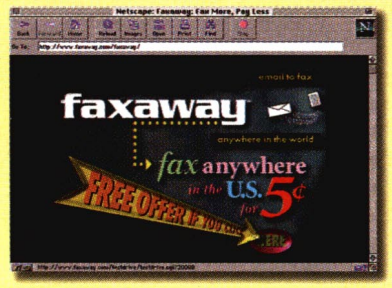

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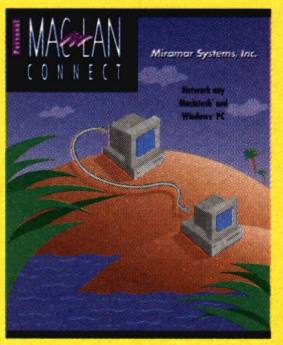

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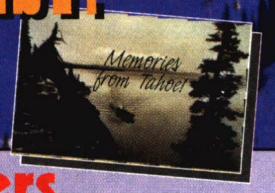

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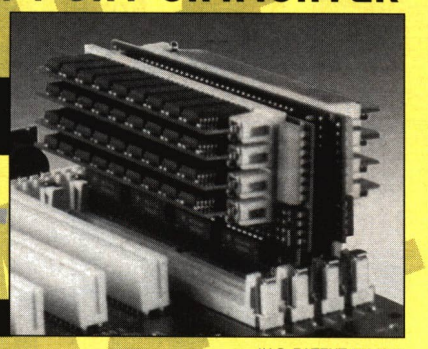

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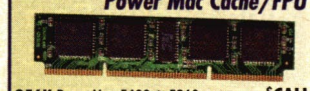

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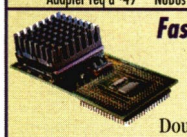

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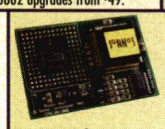

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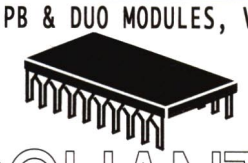

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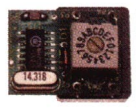

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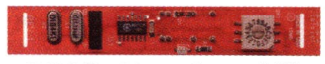

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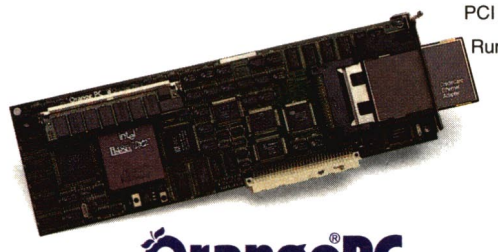

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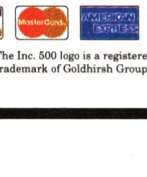

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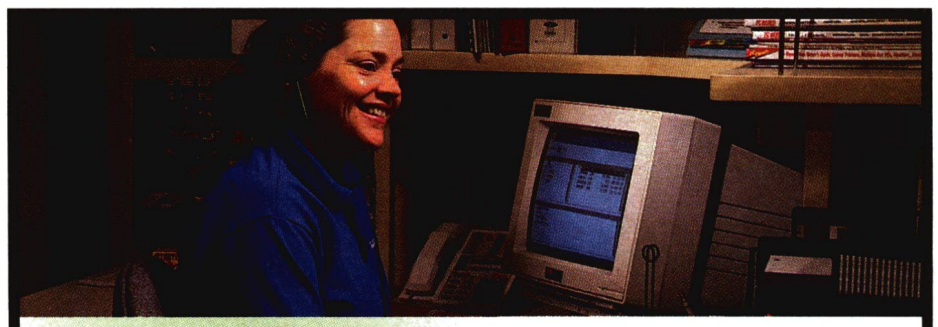

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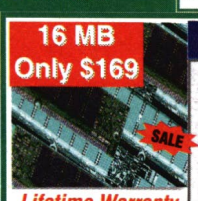

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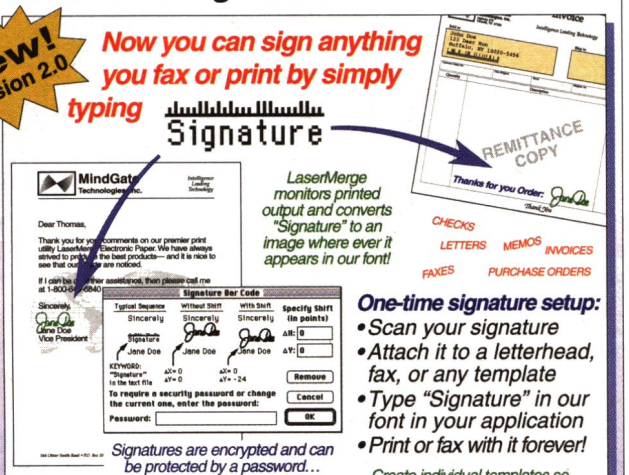

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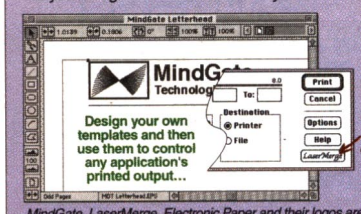

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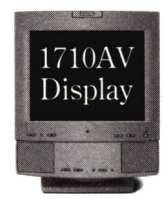

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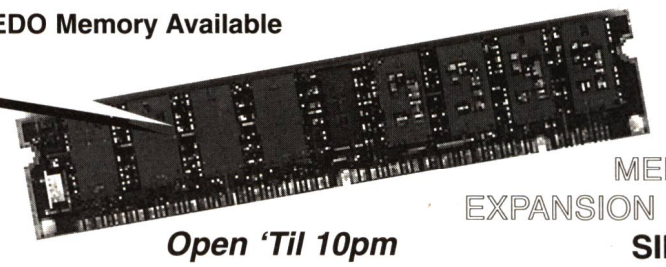

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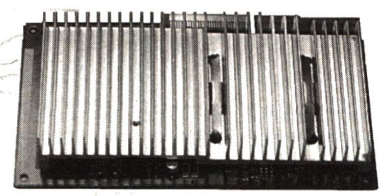

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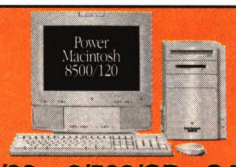

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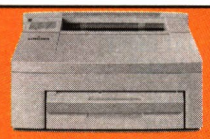

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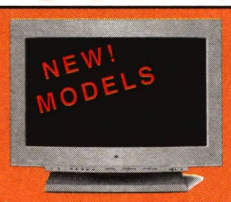

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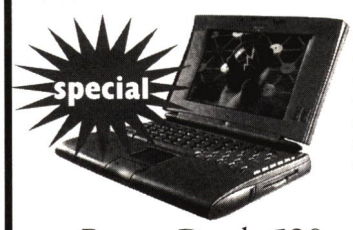

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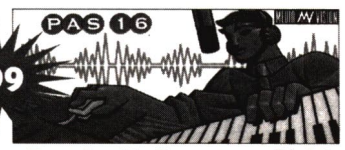

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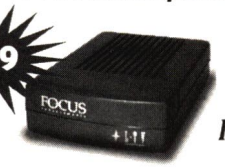

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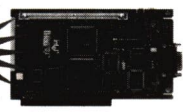

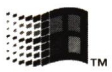

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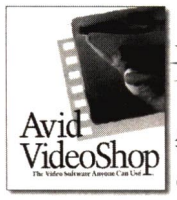

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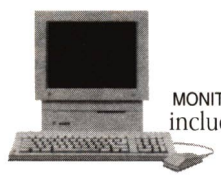

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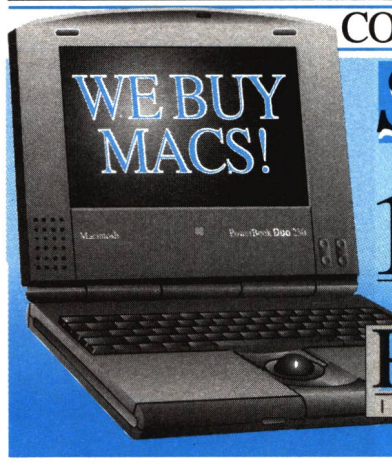

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Fractal

From Page 1

nior designer at Rucker Design Group, of Mountain View, Calif.

Expression users will choose from three kinds of strokes: natural media strokes that mimic traditional artists' tools; graphical elements, which can be any piece of PostScript art; and multiview strokes, which reveal associated graphics.

The tool will let users preserve the proportions of specific areas of a stroke or make any part of it repeat across a path. It will include a library of more than 350 strokes that users will be able to extend.

The software will layer and stretch transparent strokes, Fractal said, something that can't be done with most vector-based drawing tools.

Expression will offer Bezier-creation tools similar to those in Adobe Illustrator, although paint style and color selection will be slightly different, Fractal said. The software will include a freehand drawing pen, Bezier pen and B-spline tools.

While imported text must first be converted to outlines, "even Illustrator is not made for text," Jenkins said. "I use programs specifically for their niche."

According to Chris Le Tocq, director of software research at Dataquest Inc. of San Jose, Calif., "In a product like this, text is a supporting element rather than the prima donna."

Expression will import Adobe Illustrator or and Corel Corp.'s CorelDraw files and export rasterized bit maps of Expression illustrations to other applications, including Fractal Design Painter and Adobe Photoshop. It will support a variety of formats, including QuickTime and AVI animation.

Jenkins said he will use Expression as a complement to Illustrator. "I don't think it's going to replace anything," he said.

Sharon Steuer, a Bethany, Conn., artist and author, likened Expression to a software plug-in. "It's an ancillary program. I wouldn't change my primary production tool," Steuer said.

Positioning itself alongside Illustrator, Macromedia FreeHand and CorelDraw is "a smart strategy," said Joan-Carol Brigham, senior staff consultant at International Data Corp. in Framingham, Mass.

However, Fractal will have to continue to add value to maintain its edge, she said. "[Fractal is] really struggling to stay ahead of the curve," Brigham said.

Le Tocq said he expects to see similar technology from Adobe Systems Inc.

Fractal Design Corp. of Aptos, Calif., can be reached at (408) 688-5300 or (800) 846-0111; fax (408) 688-8836; http://www.fractal.com/. □

Fractal's updates to Ray Dream Designer and Ray Dream Studio will add support for QuickDraw 3D RAVE, 3DMF, VRML, GIF and JPEG.

Fractal puts stamp on Ray Dream Designer

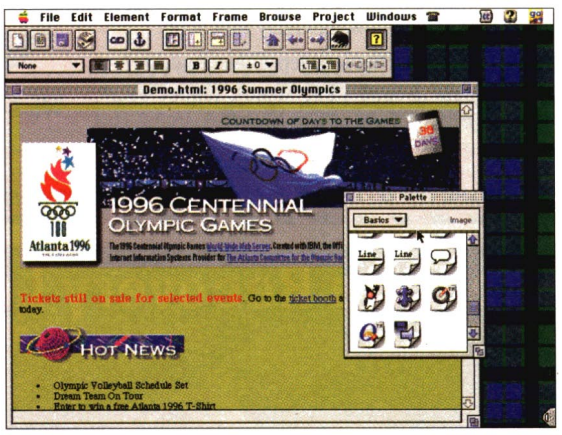
After acquiring Ray Dream Inc. last month, Fractal Design Corp. did not miss a beat in updating the Ray Dream line of 3-D illustration and animation software.

Designer 4.1 and Studio 4.1, due in July, are free upgrades that will support Apple's technology for 3-D graphics acceleration, called QuickDraw 3D RAVE (Rendering Acceleration Virtual Engine), and QuickDraw 3D's 3DMF (3-D metafile format). Fractal will add its own technology for interactive rendering of texture maps and lighting.

The update will feature new Internet components, such as a Virtual Reality Modeling Language export filter and support for GIF, transparent GIF and JPEG images. Visible motion paths for animation and additional levels of anti-aliasing will round out Version 4.1.

Ray Dream Studio, which comprises Designer 4.0, Animator, the Extensions Portfolio API and a collection of 3-D clip art, lists for $499.

Ray Dream Designer 3.0 users can upgrade for $149 until July 31 and $199 thereafter. — *By Rebecca Gulick*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golive, a German entry in this year's HTML-editing competition, excels at frames and inputting a variety of media, such as Java applets and QuickDraw 3D objects.

German HTML editor constructs Web frames

By Joanna Pearlstein

Among the new contenders in the Web publishing lineup is golive, a $49 WYSIWYG HTML editor from gonet communication GmbH.

golive, which shipped earlier this month, lets Web publishers create documents with frames and add Java applets and content that requires a Netscape Navigator plug-in to their pages.

Users can drag and drop text, graphics and QuickTime movies into golive documents and create image maps.

The product provides search-and-replace and forms creation tools as well as the capability to build lists and assign colors to text and backgrounds.

Users can also add images to the background of their pages. Most features are accessible from golive's tool bar.

Like other graphical HTML editors, golive lets users view HTML source code but hides it from them unless its presence is requested.

The product does not include table support, but gonet said it expects to add that feature in Version 2.0.

golive's Gallery feature lets users store frequently used files and images in floating windows. Users can then drag and drop items from the Gallery into pages.

A project feature keeps track of the locations of all elements and hyperlinks on the page.

golive requires a 68040- or PowerPC-based Mac and System 7.5. A free demo version is available at http://www.gonet.de.

gonet communication GmbH of Hamburg, Germany, can be reached at 49-4-038-0231; support@gonet.de. □

Apple ships 12-ppm laser

By Leander Kahney

Apple this week is slated to deliver a new network laser printer that features a duplexing option.

While most current Apple printers draw on Canon engines, the LaserWriter 12/640 PS, available now for about $1,599, is based on a Fuji Xerox mechanism. The new printer can output 12 legal-size pages per minute at 600 by 600 dpi, the same resolution as its predecessor, the LaserWriter 360. The duplexing option costs about $399, the company said.

The new model includes Adobe PostScript Level 2 as well as HP PCL 5. It ships with a 30-MHz AMD 29040 RISC chip and 4 Mbytes of RAM, which can be expanded to 72 Mbytes.

The 12/640 PS features Ethernet, LocalTalk and bidirectional parallel interfaces. It supports EtherTalk, IPX and TCP/IP protocols.

The printer comes with a 250-sheet feeder and an 80-sheet multipurpose cassette. Options include a $399 500-sheet cassette; a $149 50-sheet envelope cassette; and a $49 output tray for special media, such as transparencies or postcards.

Apple said the 12/640 PS will compete with LaserJet 5N and LaserJet 5M from Hewlett-Packard Co.; Optra Rn+ from Lexmark International Inc.; and OL-1200/PS from Okidata, a division of Oki America Inc. □

AppleSoft execs rise

By Leander Kahney

Apple is filling in the blanks in its new AppleSoft division.

Following in the footsteps of the old System Software Technology division, AppleSoft will oversee the Mac OS. CEO Gilbert Amelio named Ike Nassi, head of the old division, to be senior vice president in charge of the new division. In turn, Nassi promoted much of his old staff.

Jim Gable, former senior director of OS product marketing, is now vice president of AppleSoft marketing.

Mitch Allen, a former senior director at Apple, is now vice president in charge of Mac OS engineering. In addition to overseeing development of Mac OS 8, code-named Copland, Allen is the acting head of Communications and Networking Technologies, the group that oversees Open Transport and Apple Remote Access.

Sheila Brady, former Apple director of OS engineering, is the new vice president of graphics and imaging.

Steve Teicher, former director of international development, is now vice president of AppleSoft worldwide products and tools.

Bruce Delagi, former director of architecture, is now director of Apple software architecture. Delagi will keep an eye on compatibility among Apple's divisions, including the Java development team at AppleNet, another of Apple's eight new divisions.

Mike Connor, former senior director of tools, operations and quality, is now vice president of reliability and quality assurance. Connor will work across divisions to ensure the quality control. □

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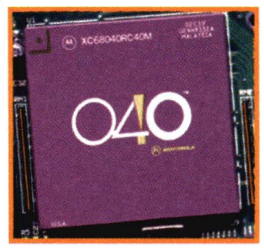

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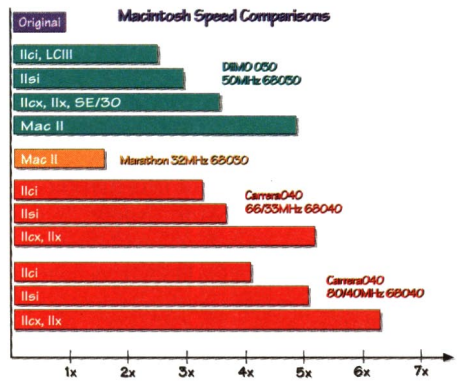

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DiiMO 030 50MHz 68030	$199.99	#79087	$249.99	#79088

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The ThunderPro and ThunderCachePro accelerators are the same as the Thunder and ThunderCache accelerators with the addition of four SIMM slots to break the limiting 10MB RAM barrier associated with the LC and LCII. They let you upgrade your memory up to 26MB. The ThunderCachePro is also available at 50MHz for more speed.

68040 from $299

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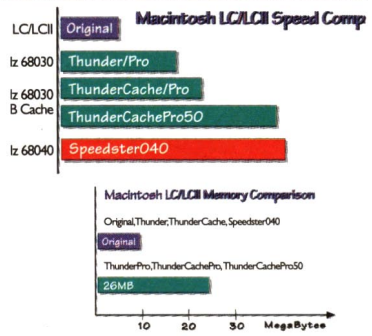

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Thunder 32MHz 68030			$149.99	#69219
ThunderCache 32MHz 68030 w/32KB Cache	$199.99	#69220	$249.99	#69221
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ThunderCachePro 32MHz 68030 w/32KB Cache & 4 SIMM Scks	$249.99	#69224	$299.99	#69225
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ThunderCache 32MHz 68030 w/32KB Cache	$199.99	#69229	$249.99	#69230
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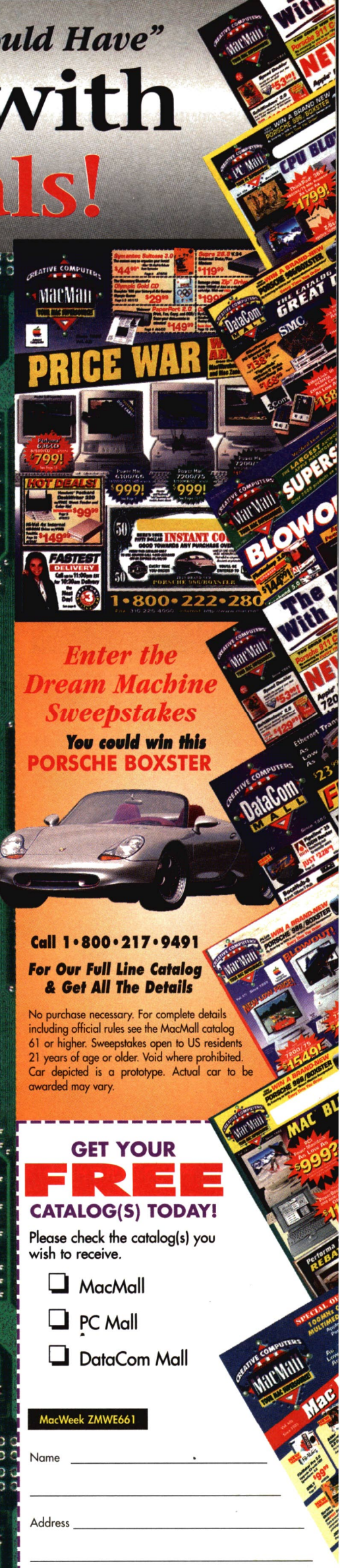

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Claris

From Page 1

users create HTML documents containing frames, tables, Java applets, multimedia files and JavaScripts. The graphical Web page-layout program will run on Mac OS, Microsoft Windows 95 and Windows NT.

Claris said it plans to bring the product to market under the name Claris Home Page. A public beta release is expected at the end of June; the final version will ship this summer. Pricing has not been set.

Sources said that when Claris was looking to buy a Web-authoring tool, it considered Akimbo Systems' Globetrotter alongside Loma Prieta (see story, Page 1). However, the fact that Globetrotter was a Mac-only program reportedly dissuaded Claris from purchasing it.

Terms of the deal between Santa Clara, Calif.-based Claris and San Andreas were not disclosed. But Claris said it bought the software rather than the entire company. Claris will take over the coding from now on, but San Andreas' programmers have agreed to help.

Dennis Marshall, Claris director of solutions products, said Home Page fills a void in Claris' Internet lineup. He characterized Home Page as just one piece in an emerging Internet strategy, which will later include Web-site management and site-hosting services. Claris officials said they are considering developing tools to integrate Home Page with Claris FileMaker Pro, its recently released OfficeMail and third-party programs.

Yet, Home Page is on a fast track to release and will not wait for those tools, Marshall said. In addition to the Version 1.0 release, "We plan to put out a major update of the product this year," he said.

Analysts said they expect Home Page to mimic the price, ship date and features of the leader in this market — Adobe PageMill. Adobe Systems Inc. said Version 2.0 of its WYSIWYG HTML editor will cost $99 and ship in July (see 04.22.96, Page 8). Version 2.0 will be PageMill's first cross-platform release; its key features are similar to those promised for many graphical editors due out this summer (see chart above).

Claris will have to race to compete with these upcoming Web editors, analysts said. "If they need to just play, I think there is plenty of room for new players; if they need to be dominant, the window is closing," said Michael Sullivan-Trainor, Internet commerce research director at International Data Corp. in Framingham, Mass.

Joan-Carol Brigham, senior staff consultant for IDC, said, "They are going to be fighting the noise." She characterized the HTML-authoring market as a horse race and said it will be a photo finish as to who will lead the market at the end of the year. Brigham and other analysts agreed that the Claris name is Home Page's best asset. □

The multilingual Web option is Tapestry. See Page 20.

Summer showdown for WYSIWYG Web editors

PRODUCT	PRICE	SHIPS	BUILD TABLES	BUILD FRAMES	DISPLAY HTML	EMBED JAVA APPLETS	EMBED CONTENT FOR NAVIGATOR PLUG-INS
Globetrotter	n/a	July	✔	—	—	✔	—
golive 1.0.1	$49	Now	—	✔	✔	✔	✔
GNNpress 1.2	Free	Summer	✔	—	✔	✔	—
Home Page 1.0	n/a	Summer	✔	✔	✔	✔	✔
HoTMetaL Pro 3.0	$159	Q3	✔	✔	✔	✔	✔
Navigator Gold 3.0	$79	Summer	✔	✔	✔	✔	✔
PageMill 2.0	$99	July	✔	✔	✔	✔	✔
Tapestry 1.2	$69	July	✔	—	—	—	—

Akimbo

From Page 1

create a link when a file is dragged into a Web document, sources said. The Mac-only program will use System 7 aliases to track files when they are moved. It will also automatically link complete or partial URLs (uniform resource locators) pasted into pages.

The software will feature a range of graphics options, sources said. When a user selects a font not included in the HTML specification, Globetrotter will automatically convert the text to a GIF image.

Globetrotter will offer many word processing features, including headers and footers, outlines, and style sheets, sources said. It will come with a spelling checker, thesaurus, and search-and-replace functions.

Globetrotter will reportedly create forms; tables; and image maps, including client-side image maps. It will also support background pictures and colors. Sources said users will be able to call Java applets from Globetrotter and embed JavaScript in documents.

Sources said Globetrotter will write CGI (Common Gateway Interface) scripts automatically. It will come with several scripts for everyday tasks such as creating tab-delimited text files or automatically mailing data from forms.

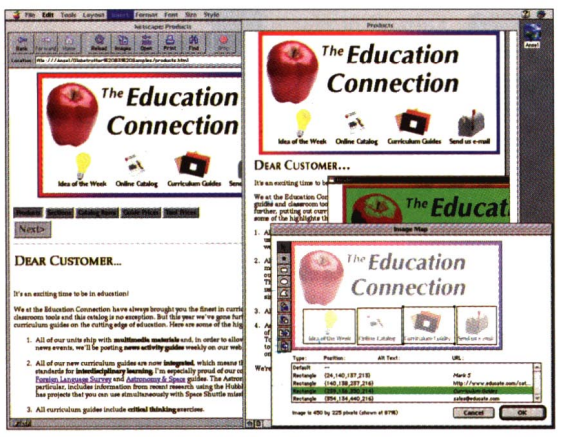
In addition, the product will reportedly provide site-management capabilities similar to those found in America Online Inc.'s GNNpress, such as preparing files for placement on a Web server, uploading pages and maintaining the integrity of links.

Sources said the software will attempt to bridge hard copy and electronic-document creation; it will use a proprietary format for printing and Portable Document Format for viewing with Adobe Systems Inc.'s Acrobat.

Akimbo may deploy its Globetrotter technology in several products: a low-end HTML editor with templates, a higher-end Web publishing product, a so-called cross-media product for creating Web- and paper-based documents, and plug-ins for existing word processors.

Pricing has not been set. Akimbo Systems declined to comment. □

David Morgenstern and Clifford Colby contributed to this report.



Akimbo Systems' Globetrotter will let Web publishers create image maps, including rare client-side image maps, in their Web sites.

ARA 2.1 talks ISDN and V.34

By James Staten

Apple Remote Access will come up to speed this week with a software update and a new PCI-based MultiPort Server version.

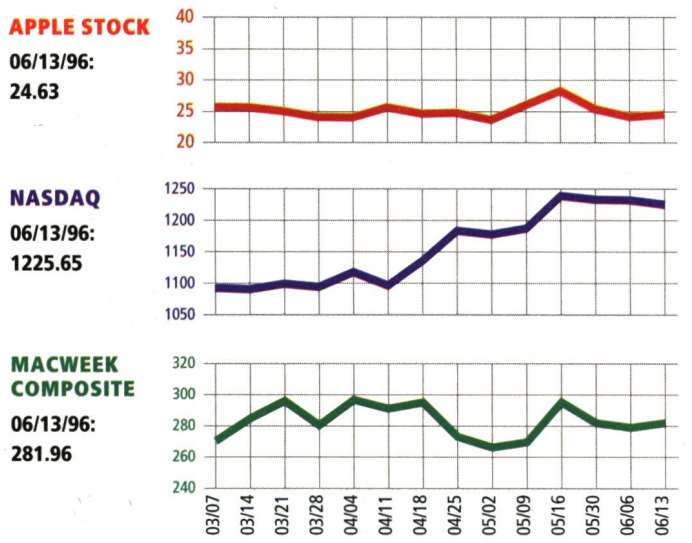
ARA 2.1, a free upgrade to the $59 client and $189 personal server, is more compatible with 28.8-Kbps modems and ISDN connections running up to 115.2 Kbps. The new version includes an expanded set of modem scripts, which are now organized in a folder inside the Extensions folder.

ARA MultiPort Server 2.1.1 PCI, priced at $1,099, handles up to six ports, including high-speed modems and ISDN connections. The $799 NuBus version of MultiPort Server shipped in February; it supports four ports, and its ISDN connections run up to 57.6 Kbps.

Owners of the NuBus MultiPort Server will not be eligible for an upgrade to the PCI server, Apple said.

Users can download ARA updates from ftp.info.apple.com, ftp.support.apple.com and http://www.info.apple.com. The software can be ordered from Claris Corp. for $13 at (800) 293-6617. □

StockWatch



	06.13.96 CLOSE	WEEKLY CHANGE
Apple	24.63	0.38
MacWEEK Composite*	281.96	3.01
SOFTWARE DEVELOPERS		
Adobe	37.25	2.19
Caere	12.13	-0.38
CE Software	2.38	-0.13
Fractal	17.63	0.75
Graphsoft	6.63	-0.25
Insignia	10.38	0.38
Intuit	52.75	2.75
Macromedia	29.75	-13.25
Microsoft	124.63	4.81
Novell	14.00	0.00
Oracle	34.38	1.50
Symantec	14.31	-0.19
STORAGE		
Iomega	39.19	1.31
Pinnacle	8.25	-0.50
Quantum	16.13	-6.75
Seagate	48.38	-8.13
SyQuest	9.06	-0.94

	06.13.96 CLOSE	WEEKLY CHANGE
PERIPHERALS VENDORS		
AmeriQuest	0.94	0.00
Asanté	7.75	-0.38
Focus	3.88	0.00
Global Village	10.75	-0.25
HP	101.00	-3.38
QMS	6.00	0.13
Radius	2.63	-0.50
Shiva	85.63	13.63
Tektronix	37.38	-0.38
Truevision	7.25	-0.13
DISTRIBUTORS		
CompUSA	37.25	-4.25
IE	10.13	0.06
Merisel	4.19	0.19
Tech Data	22.25	0.13
INDUSTRY INDICATORS		
Compaq	47.13	-1.50
IBM	103.25	2.00
Intel	75.00	-0.25
Motorola	64.88	0.75
SGI	26.38	0.63
NASDAQ	1225.65	-6.87

**The MacWEEK Composite is calculated by adding the stock prices of the following companies: Apple, Adobe, Asanté, Caere, CE Software, Global Village, Intuit, Macromedia, Radius, Shiva, SyQuest and Truevision. Source: Nordby International Inc.*

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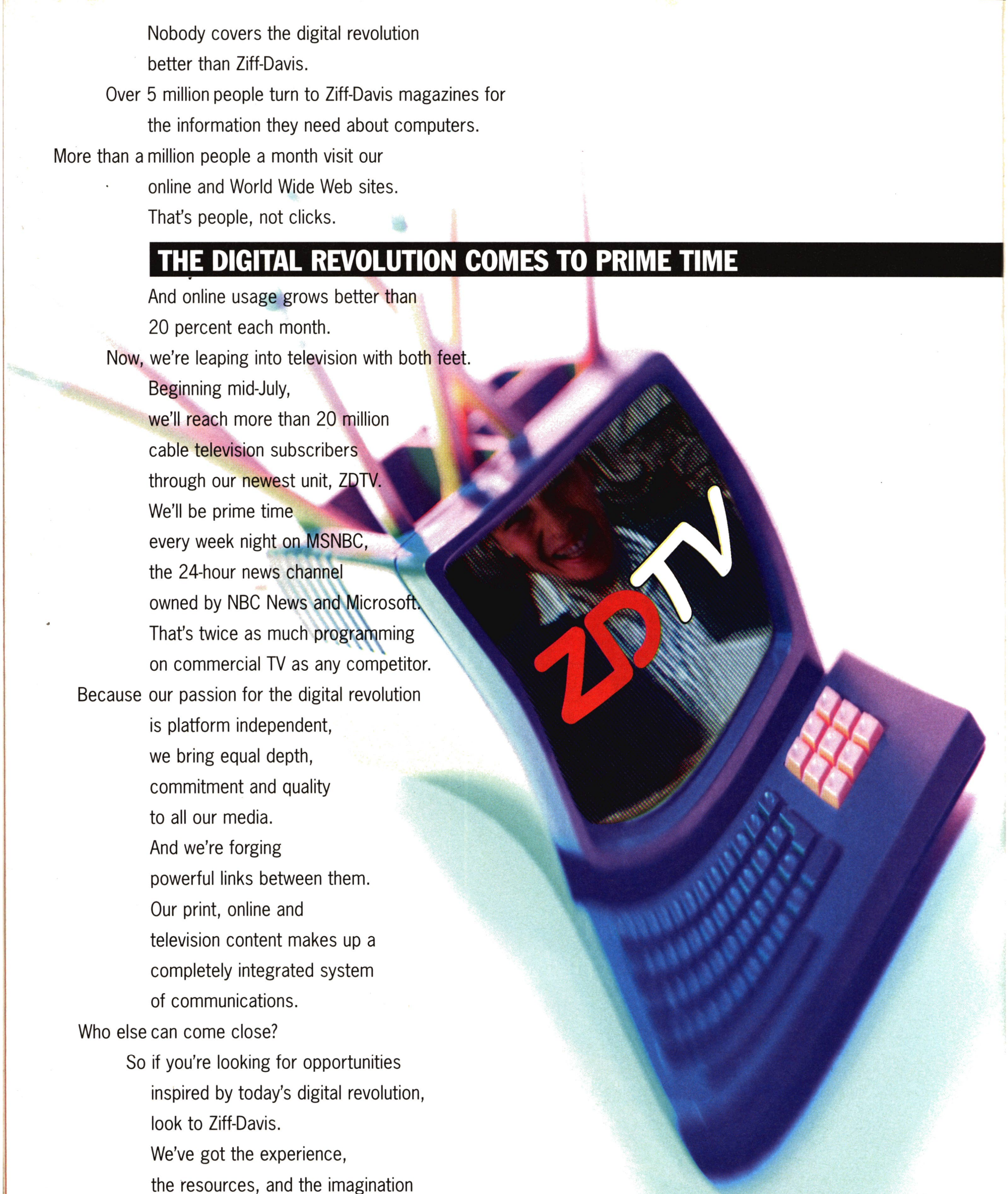

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DOS

From Page 1

tor runs Mac and PC graphics signals through one monitor. The cards double up TCP/IP networking through the Mac's Ethernet port, enabling simultaneous Mac and Intel-standard PC Internet connections.

Orange Micro does not preconfigure its cards, so pricing is dependent upon the processor and the RAM chosen for each card, the company said. In an 8-Mbyte configuration, a 66-MHz 486/DX2 card will cost $797, a 133-MHz 5x86 will be $1,147, and a 100-MHz Pentium will be $1,297.

▶ **Reply** this month said it will not release the PCI version of its DOS on Mac card until September. The company originally planned to ship the Pentium-based devices in June, but complications in licensing technology from Apple and developing a bus-mastering PCI-bridge chip delayed the line.

Reply's cards will hold up to 128 Mbytes of RAM using standard DIMMs and support PC graphics at 1,280-by-1,024-pixel resolution in eight-bit color. The cards will come with enhanced parallel and serial ports, Sound Blaster-compatible audio, and token-ring or Ethernet options.

Reply's cards, like Orange Micro's, will not ship with a specific processor but will work with up to a 200-MHz Pentium processor. The basic model will be available with no CPU or RAM for $695. Pricing for the configured models has not yet been set.

▶ **Apple** last week shipped two coprocessor cards that bring DOS compatibility to any PCI Power Mac. The new PC Compatibility Cards are available in a $1,049 12-inch-long version with a 100-MHz Intel Pentium and a $799 7-inch card based on a 100-MHz Cyrix 5x86 chip.

The Cyrix card comes with 8 Mbytes of RAM in its single DIMM slot and supports up to 64 Mbytes. The Pentium model has 8 Mbytes soldered to the board and an empty DIMM slot; it can support up to 72 Mbytes of RAM. Both cards ship with an ATI Mach64 graphics controller for 24-bit color at 1,024 by 768 pixels.

Unlike previous Apple DOS cards, the new models will support concurrent Mac and PC networking.

Orange Micro Inc. of Anaheim, Calif., can be reached at (714) 779-2772; fax (714) 779-9332; sales@orangemicro.com; http://www.orangemicro.com.

Reply Corp. of San Jose, Calif., is at (408) 942-4804; fax (408) 942-4897; http://www.reply.com. □

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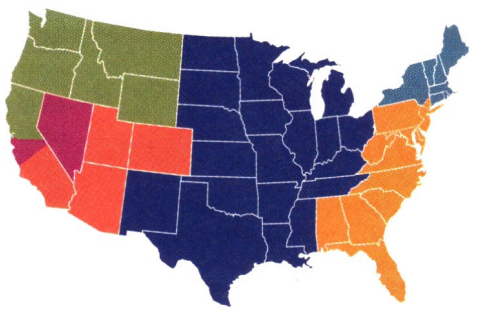

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The best Macs of my generation

Ever since the infant Knife was left in a picnic basket on the center divider of the Long Beach Freeway he has been obsessed with fast-moving vehicles of any stripe.

The nuns of Tova Borgnine's Little Sisters of Charity often threw up their hands in despair at their ward's high-velocity hijinks with the orphanage's power mower. Growing to strapping utensilhood on a steady diet of Kerouac, the Knife soon became convinced his life's work was to burn, burn, burn like a flaming Roman candle across the American be-bop night, whether he was at the helm of a '56 Chevy or a Sears Kenmore dishwasher.

My little CPU

Ah, sweet bird of youth! While he still finds calfskin racing gloves enhance his vacuuming gestalt, the Knife now limits his hot rodding to the electronic highways and byways of Silicon Valley.

Blissfully for middle-aged speedsters everywhere, the gone daddies and hep cats at Apple seem equally determined to burn rubber in their quest for CPU velocity. Take the forthcoming Instatower, the company's multimedia machine for the masses.

It seems the boys in the machine shop just can't keep their mitts off this jalopy: Since the beginning of the year, the projected speed of its PowerPC 603e has risen from 100 or 120 MHz to as much as 200 MHz, and the RAM configuration has jumped from 8 Mbytes to 24.

Of course, what's a set of wheels without a commensurate pair of speakers? According to the little old ladies in Cupertino, the Instatower will also sport a built-in subwoofer and SurroundSound.

Meanwhile, Mac grease monkeys who want to get under the hood of a Power Mac 8500 or 9500 should find their machinations enhanced by a forthcoming redesign that makes these sedans about as easy to soup up as the idiot-proof Instatower.

Spin cycle

Nor are Apple's disc jockeys standing still as the company gears up for its next generation of CD-ROM drives. According to the Knife's fleet of muscle-car mavens, the Power Mac 7600 will be upgraded with an 8x CD-ROM by August, and its PC Compatibility card bundle will get bumped to 16 Mbytes of on-card RAM.

And the 7600 isn't the only vehicle due for an eight-cylinder CD-ROM drive. Indeed, developers who have been test-driving prototypes of the aforementioned Instatower attest that their machines arrived tricked out with 8x drives. Nevertheless, Apple still seems uncertain about veering into the fast lane; according to the Knife's cadre of motorheads, the company has been petitioning customers about whether they would prefer a four-banger CD-Recordable drive in place of an 8x CD-ROM.

Dead man's curve

Third parties also seem to be getting into Apple's hell-bent-for-leather spirit when it comes to Mac bodywork. Viz Global Village Communication, which is revving up a cherry V.34 modem card destined to be bundled with the Instatower.

Meanwhile, on the software track, Global is working on an upgrade to its 28.8-Kbps Platinum modems that will boost their horsepower to 33.6 Kbps. Wop-bop-a-loo-bop-a-wop-bam-boom!

Mac users should not feel too smug about Global Village's devotion to their sphere, however, if news about a new OneWorld fax-and-data modem server is any indication.

According to Globelves in the workshop, the new box will work only in conjunction with Windows NT servers, since NetWare was too difficult to write for. □

Born to run at the mouth? Just strap your ear round that velvet phone and wrap your lips round a complimentary MacWEEK mug! (415) 243-3544; fax (415) 243-3651; mac_the_knife@macweek.com.

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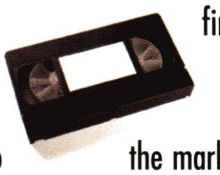

The miroMOTION's professional quality S-Video editing boasts high resolution (640 x 480), at a frame capture rate of 30 frames per second (60 Fields Per Second) while delivering high-quality output.

On the other hand, a Power Mac 8500, regarded by Apple as their flagship audio-video machine, gives you video output that leaves you feeling, well, quite underwhelmed (see above photos please). But that's not surprising when you consider the video output resolution on the Apple PowerMac 8500 (320 x 240) is just one-quarter of what you get from a Power Computing AV system. And lest we forget, the frame capture rate of Apple's AVs is a puny 25 frames per second, fine for flipbooks, but not for full-motion video.

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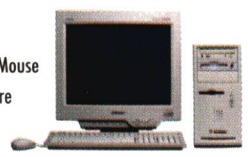

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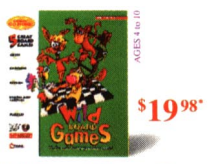

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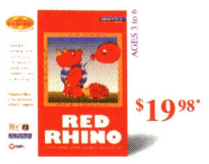

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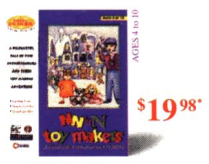

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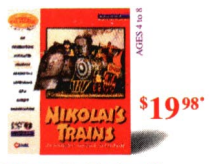

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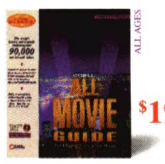

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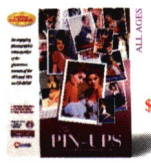

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